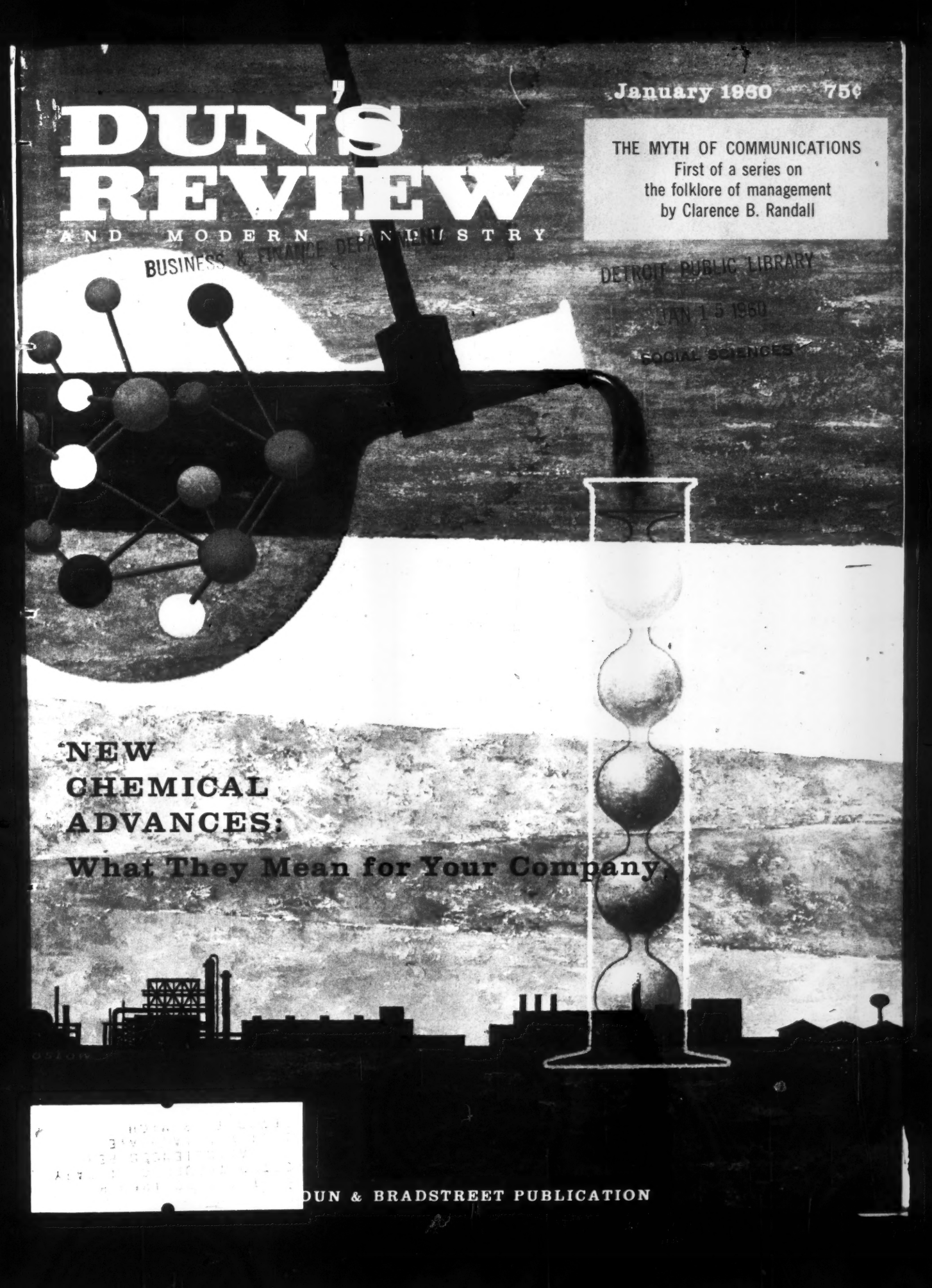
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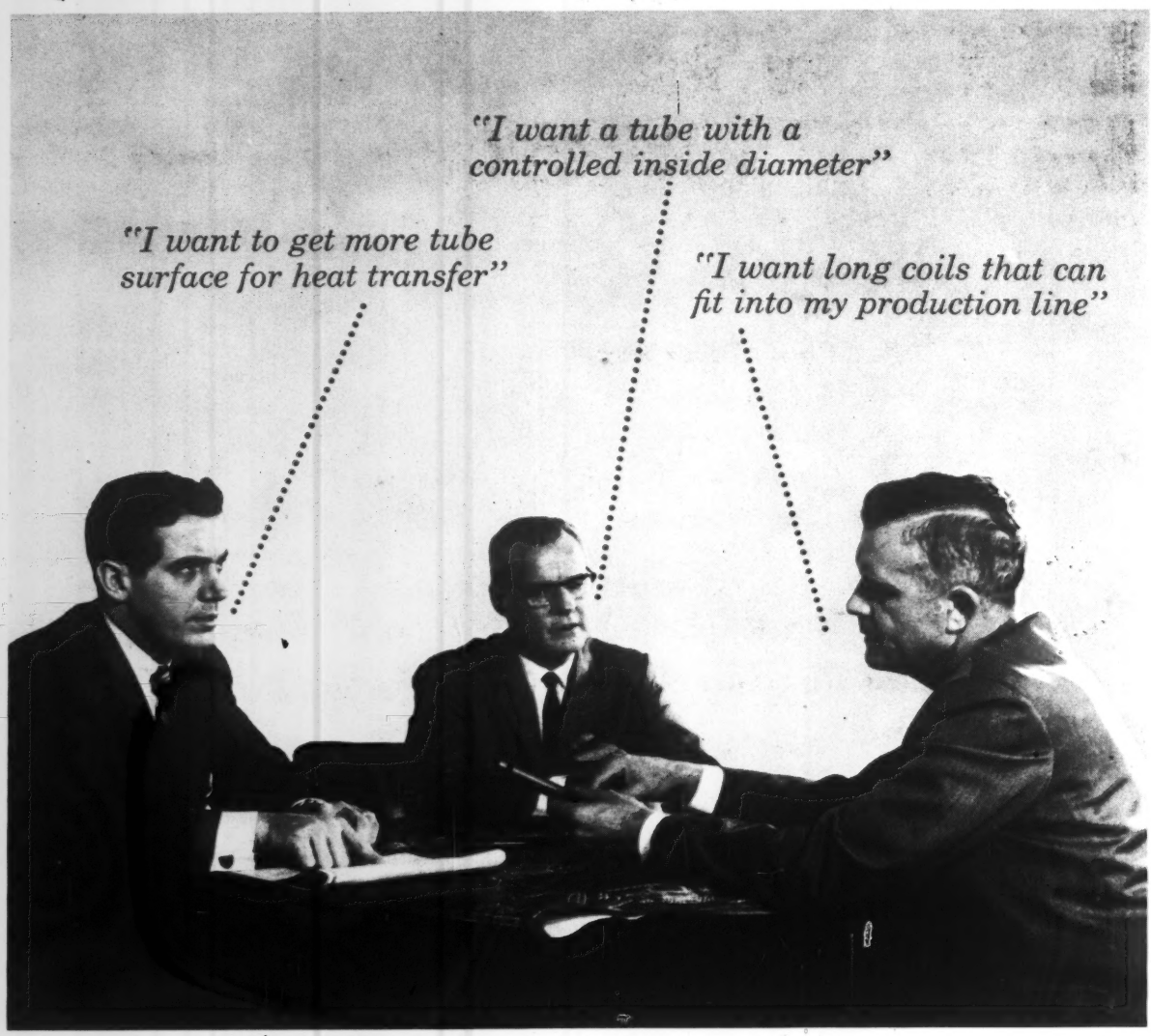
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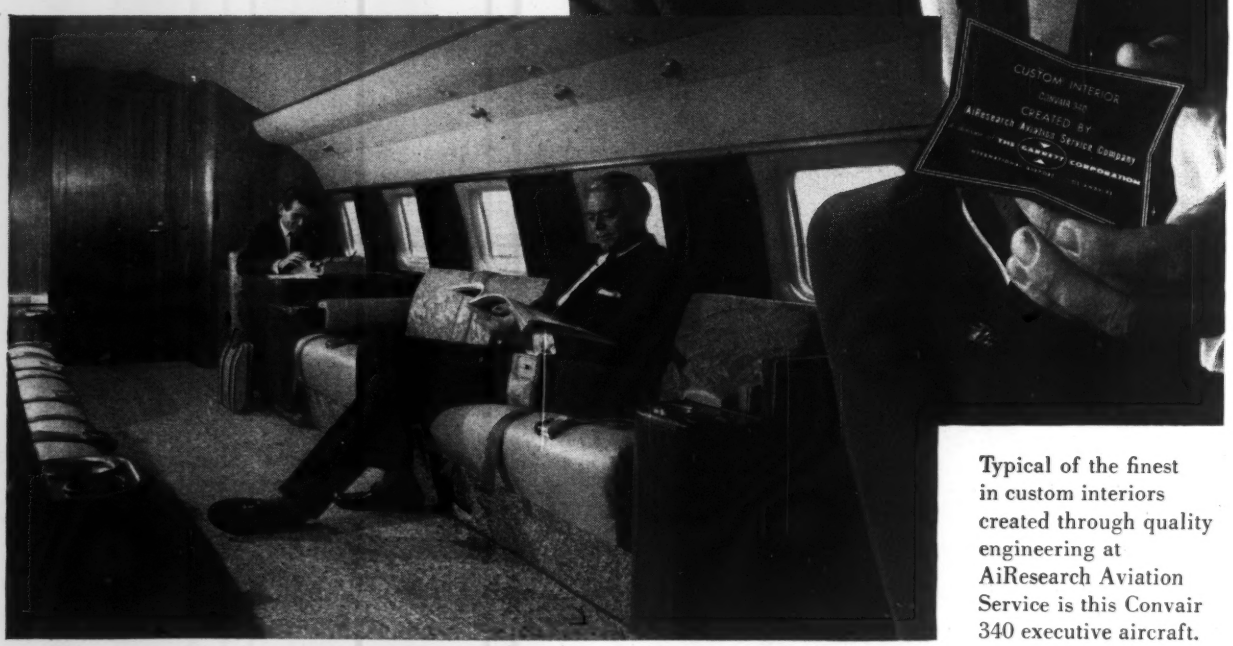

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DUN'S REVIEW AND MODERN INDUSTRY, January 1960, Vol. 75, No. 1. Published monthly by Dun & Bradstreet Publications Corp., J. Wilson Newman, President. Publication Office: 300 West Adams St., Chicago, Ill. Entered as second class matter at the Post Office, Chicago, Ill.

Correspondence for Editorial, Advertising, or Subscription Offices should be sent to Dun's Review and Modern Industry, 99 Church St., New York 8, N.Y.

Subscription: $5 a year in USA and Possessions, and Canada. Elsewhere, $10. Single copy, 75 cents. Please state title and employing company when subscribing.

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CREDITS: Cover, Howard Koslow. *Page 31, left to right*, photographs courtesy of Patterson-Moos Division Universal Winding Company; U.S. Air Force; Charles Phelps Cushing; E. I. du Pont de Nemours & Company; and Allied Chemical Corp. *Page 35*, photo from the New York Herald Tribune. *Page 91*, photo from United Press International.

EDITORIAL

The Face of Time

AT the beginning of a new year, the significance of time as a measuring stick is most eloquent, insistent, and often irritating. In this period, there is the necessary drudgery of budget making, quota setting, and cost comparisons, but there are also the larger philosophical and economic considerations of the meaning of the Arabic numerals on the calendar. Time is a primary asset as well as a fixed expense item, and our profit-or-loss ratio depends on how well we employ the former and control the latter.

Engineers can make precise time-study recommendations for any repetitive mechanical, routine, or automatic action, but it is a bit more difficult to measure the value of the time of the executive, salesman, clergyman, or physician. And yet, these men must find a time pattern in which they are the master and not the slave of the calendar or clock.

There are 480 minutes in an eight-hour day. According to a recent survey, the typical top executive spends 120 minutes pushing papers around. If he is one who delves excessively in research and sales data, he may spend 180 minutes, or one-third of his office time, in areas that are the assigned territories of an assistant. Too many executives squander time on details while major policy decisions wither on the vine.

The typical commercial salesman spends from 90 to 180 minutes a day conferring with the man who can sign on the dotted line or say no. The number of precious moments he must spend seeking the dollar decision that is important to his income and necessary to his employer's profits depends on the type of produce or service he has to sell. His skill in managing his time is manifest in the minutes spent in selecting the right company and right man to call on, in studying the product or service in relation to the customer's needs, and in the quality of preparation for the sales pitch. It may take ten to 100 sales calls and cost from $100 to $1,000 or more to put an account on the books. All this has to be measured in terms of time as well as dollars.

Almost any professional man, whether physician, dentist, engineer, or consultant, measures his effectiveness against a time schedule. Yet, there are rewards that lie beyond the routines of the clock and calendar, and we shall do well to consider these timeless values as we enter into a new year and close out a decade. The period of 1950–60 was one of tremendous technological achievement, equaled only by the political anxiety it created in our lives. In a sense, man's quarrel is with time, and he must battle the calendar to gain his highest aims as a thinking creature whose acts are judged by their community contribution rather than by individual reward.

No matter how pressed we are for time in our daily affairs, there is always time left over. Thinking, responsible persons with a sense of identity in time must occasionally confront the clock and calendar and remind themselves who is boss.

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The Trend of BUSINESS

Production: *Output to set records through late spring*

Sales: *Year-to-year gains foreseen at all levels*

Inventories: *Over-all increases to level out by year end*

Failures: *November casualties up slightly (page 13)*

OVER-ALL business activity will hit new peaks in the early months of this year. Gains in spending by business men for expansion and inventory, as well as steady advances in retail sales, will more than offset a leveling off in Federal Government spending and residential construction.

Total industrial production, now close to its pre-strike peak, will set new records through late spring and then begin to level out.

However, if walkouts occur in the railroads and other industries or recur in the steel industry, the new peak in industrial production will be postponed until some time in the summer.

The recent rapid recovery in steel output is allowing auto makers, appliance manufacturers, freight car builders, and other steel consuming industries to step up their production at a faster pace than had been expected. This, along with slight but steady gains in the output of soft goods, will help the Federal Reserve Board's index of industrial production surpass this month the record 155 (1947–49 = 100) of last June. The index will advance steadily to a new peak of close to 170 sometime in late spring.

Production gains in the coming months will be particularly noticeable in electric power, lumber and paperboard, coal mining, electronics, and machinery.

Steel supplies will remain low in the coming months, and mills can expect new orders to be sustained at high levels.

If the strike is not renewed, ingot production in 1960 will exceed the record set in 1955 by almost 10 per cent. Mills, however, may have some difficulty in rebuilding their stocks of iron ore because of a shortage of railroad freight cars. This situation is likely to have an adverse effect on coal production. Imports of iron ore have recently stepped up and will remain high through the winter.

Some types of finished steel will continue to be in limited supply, restraining activity in some manufacturing lines through the first quarter and sustaining the recent high level of finished steel imports.

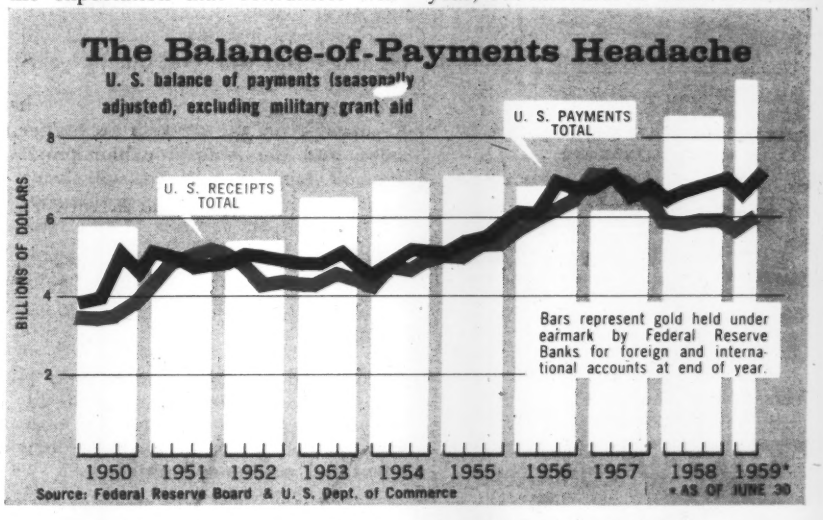
To make up for greatly curtailed production in late 1959, auto makers have scheduled a record output for the first quarter of this year.

As dealers' stocks are replenished, output is likely to ease up a bit later in the year, but production of passenger cars for 1960 as a whole will be well over 6.5 million, the highest level since the record year 1955. Of course, much of this speculation is based on the expectation that consumers will continue to be as receptive to the 1960 models, both compact and large-size, as they were when they were introduced last fall. Higher incomes and the popularity of the new compact models will be the prime stimulants to making 1960 the second-best auto year on record.

Appliance manufacturers will also step up their output schedules as steel begins to flow into their factories. This will be especially true of makers of refrigerators, automatic laundry equipment, cooking ranges, and television sets, who in recent weeks have begun to experience some shortages.

Retail sales for the first half will be about 6 per cent above the year-earlier level.

Increases in household durable goods and passenger cars will be more noticeable than in most other lines. Year-to-year gains in durables, however, are likely to narrow later in the year, but increases in other merchan-



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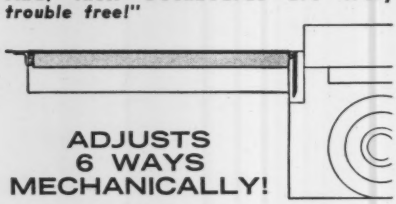

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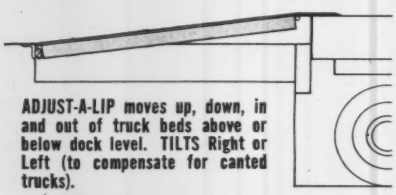

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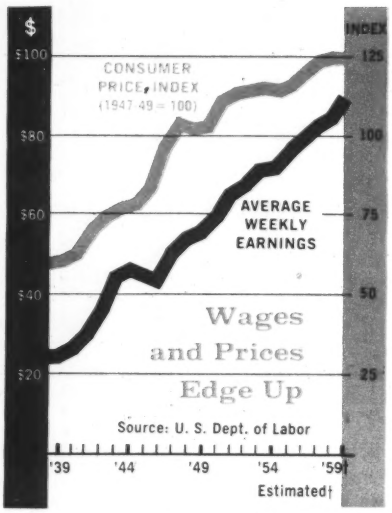
dise will show little change.

In household goods, best-sellers will be automatic washers and dryers, dishwashers, occasional furniture, upholstered chairs, and floor coverings.

Apparel stores can expect the most significant gains in men's and women's sportswear, but interest in most other clothing will advance steadily. Food sales during the first half will be up from 3 to 7 per cent over a year earlier.



EARNINGS HAVE MOVED UP *a little more noticeably than prices in recent months.*

To accommodate this rise in manufacturing and trade sales, business men will make substantial additions to their inventories.

In many lines, the recent interruption in the flow of steel has resulted in extremely low stock-sales ratios, or the relation of inventories to sales. Thus, business men will add to their holdings at an increasingly rapid rate through the spring.

However, business men in non-steel industries will show the same caution in adding to their stocks that they have shown since the last recession. Thus, when the demand for steel and steel products lessens after mid-year, over-all inventory increases will be minor and will level out by year-end.

Recovery from the steel strike, higher sales, and the general expansion of over-all business activity will bring new records in corporate profits during the first six months of the year.

But as some of the vigor is wrung out of the economy later in the year, these profit margins will narrow noticeably.

Encouraged by high earnings early in the year and feeling the need for additional capacity for production, business will step up its plans for new plant and equipment outlays.

Successive gains will occur in each quarter of this year, but a leveling off and actual declines are likely during the first half of 1961. Expenditures this year may be somewhat restrained by tight money conditions.

In the latest survey of plant and equipment expenditures made in October and November by the U.S. Department of Commerce and the Securities and Exchange Commission, outlays for 1959 as a whole were expected to total $32.5 billion, or about 7 per cent over 1958. This was a downward revision of what was expected in the previous survey conducted three months earlier. The drop was attributed to the effects of the steel strike. Some observers also feel that tight money was partly to blame. Outlays for the first quarter of 1960 were expected to be at a seasonally adjusted annual rate of $34.4 billion.

Although foreign orders accounted for much of the recent rise in machine tool orders, buying by domestic customers will pick up noticeably, and orders will advance steadily throughout 1960.

Industrial and commercial building, which was restrained by steel shortages late in 1959, will show marked gains early this year.

However, a little later, these gains will be less noticeable, and an actual decline in over-all construction outlays is quite possible in the second half. This will mean only a slight gain in 1960 as a whole over 1959.

Since there is little indication that mortgage money will become less tight or that construction costs will stop climbing, the level of housing starts in 1960 will probably fall about 10 per cent from 1959 to 1.2 million.

Prospective home buyers will continue to be discouraged by difficult mortgage terms, and housing starts will decline appreciably in the coming months.

As production moves up, employment will resume the rise that was inter-

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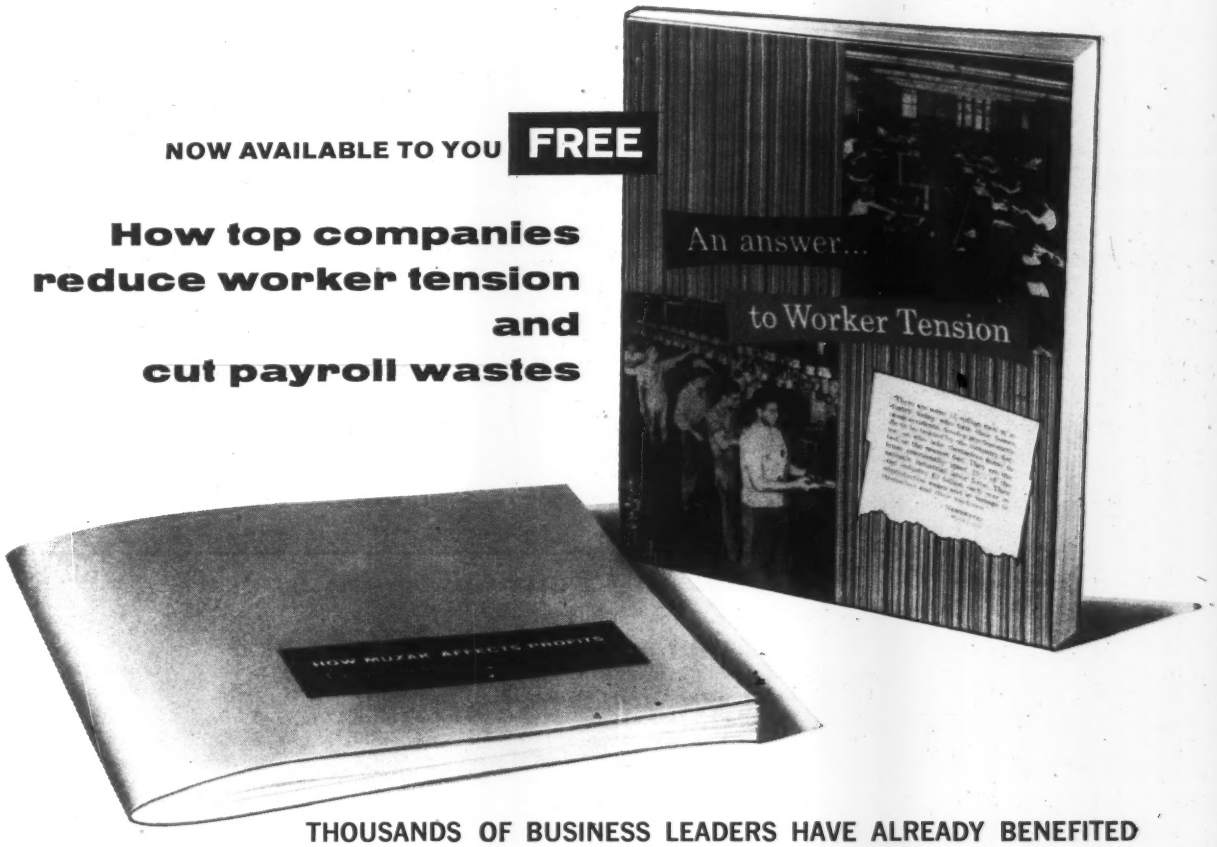

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rupted by the secondary effects of the steel strike late in 1959.

However, although monthly records in the number of jobholders will appear soon, increases in the labor force and higher output per man-hour will keep unemployment at relatively high levels for a period of business expansion. It is unlikely that in the months ahead the rate of unemployment as a per cent of the labor force will dip much below 5 per cent.

As the workforce grows, personal income will edge up into new high ground in the coming months. This will be due not only to increases in hours worked but also to modest rises in average hourly earnings in some industries.

Both business men and consumers will be confronted with slightly higher prices.

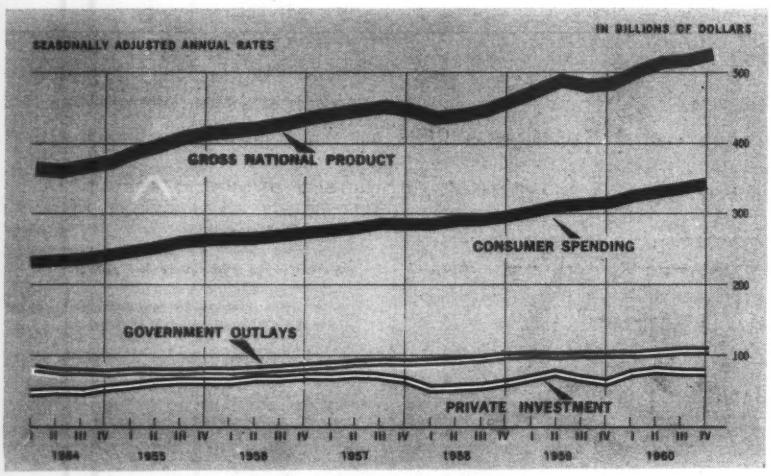
The price rises will be especially noticeable in apparel, household appliances, furniture, automobiles, and transportation. In contrast, it is likely that continued record harvests will mean either no change or declines in food prices. In addition, any deficit in the Federal budget could easily mean higher prices if it is financed through the commercial banks.

Inventory build-up, increased outlays for plant and equipment, and higher consumer spending will create a high demand for funds this year, which will tend to keep interest rates high. The Federal Reserve Board will continue to watch closely credit conditions and any upward pressure they might have on prices. In the event that it seems warranted, the Board will tighten credit by raising its rediscount rate.

A good many Wall Street observers feel that stock prices will advance once the steel issue is settled but that they will edge downward later this year when over-all business activity

Looking Four Quarters Ahead

	Quarters	Consumer spending	Government outlays	Private investment	Gross national product
1959	I	303.9	97.4	68.9	470.2
	II	311.2	97.7	75.7	484.5
	III	313.3	98.4	67.0	478.6
	IV	317.0	98.7	64.2	479.9
	Year	311.4	98.1	69.0	478.5
1960	I	324.1	99.2	76.8	500.1
	II	330.7	100.0	81.0	511.7
	III	336.7	100.8	79.9	517.4
	IV	341.2	101.5	79.6	522.3
	Year	333.2	100.4	79.4	513.0



Figures through the third quarter of 1959 are seasonally adjusted annual rates in billions of dollars, as reported by the National Income Division, Department of Commerce. Figures for the fourth quarter of 1959 and later are estimates prepared by Edwin B. George and Robert J. Landry of the Business Economics Department of DUN & BRADSTREET, INC.

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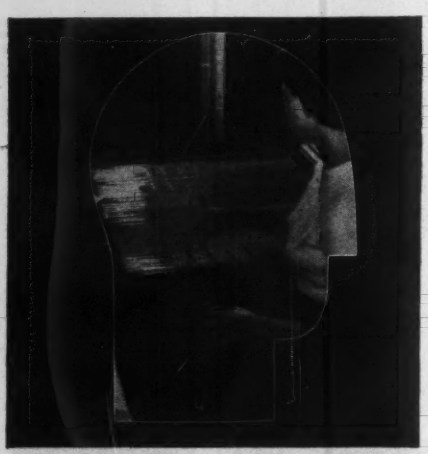

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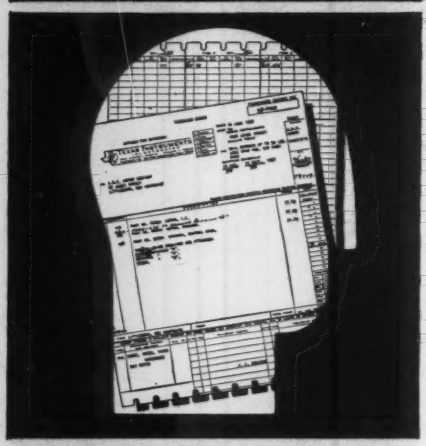

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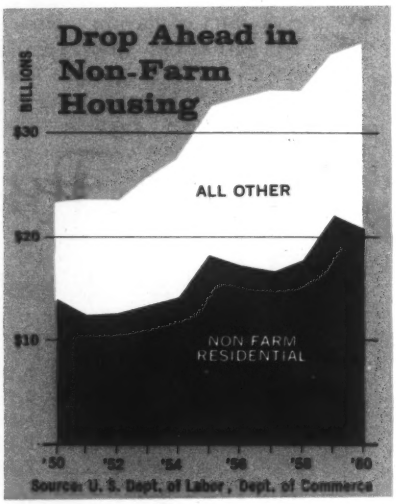
begins to lose some of its momentum.

Reflecting corporate borrowing to meet Federal tax payments, business loans at major New York City banks rose sharply in mid-December.

Gains were not quite so noticeable as at the similar time a year earlier, but preliminary estimates show that the increase for the last half of 1959 over the first six months was much greater than 1958.

Major borrowers in mid-December were food, liquor, and tobacco concerns. There were also substantial gains in loans to non-bank financial



A DECLINE IN NON-FARM *housing will be offset by increases in industrial and commercial construction this year.*

institutions, such as sales finance concerns.

Late in December, the United States Department of Agriculture estimated that farm output in 1959, including crops and livestocks, would be 2 per cent higher than 1958, setting a new record. Although crop production was expected to remain at the 1958 level, substantial gains were predicted for livestock output, accounting for the increase in over-all farm output.

In contrast, it was estimated that farm income declined 15 per cent in 1959. Lower farm prices will probably hold farm income in 1960 moderately below that of 1959. END

This report was prepared in the Business Economics Department, DUN & BRADSTREET, INC., by John W. Riday.

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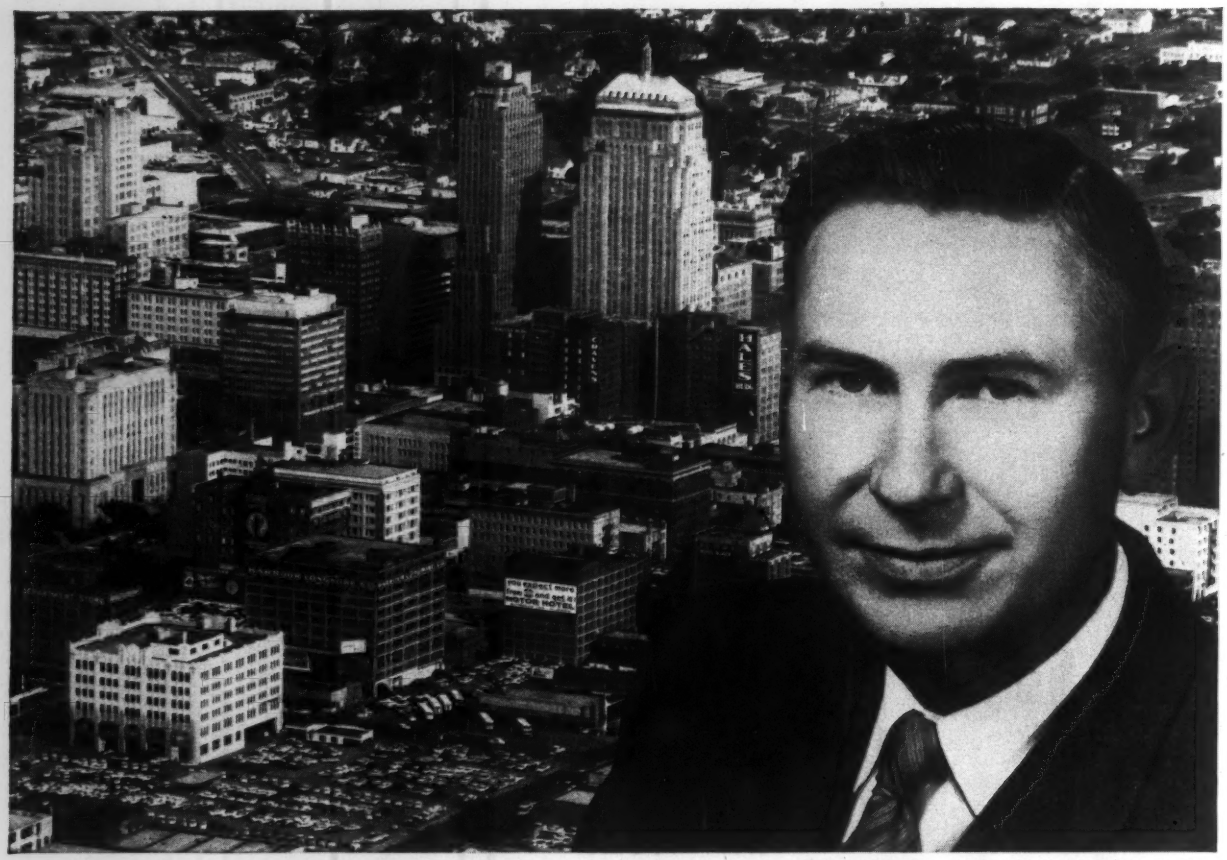

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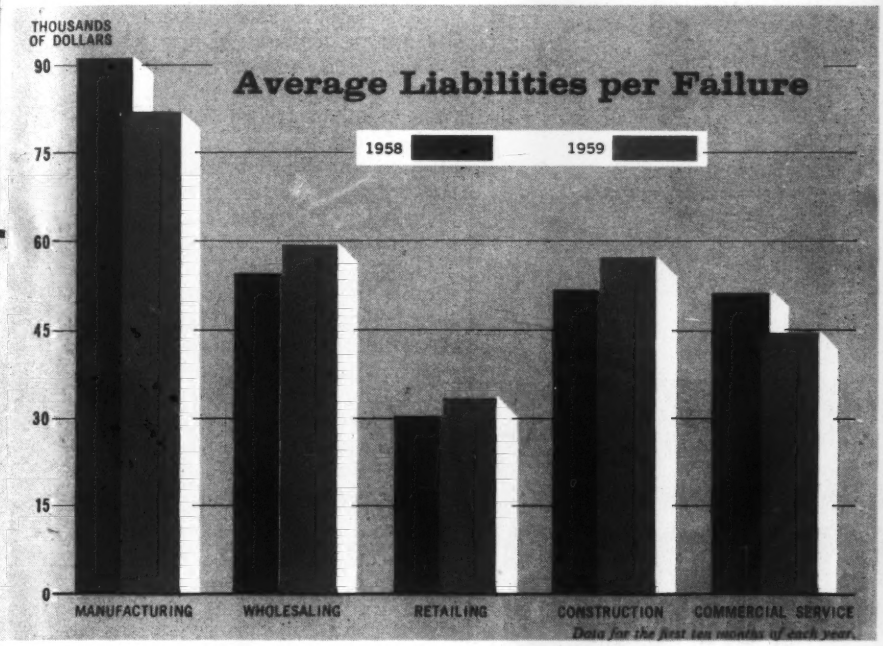
Business Failures

Casualties up slightly in November
Liabilities drop below 1958 level



BUSINESS failures, on a steady keel for the fourth straight month, totalled 1,130 in November. Casualties were only fractionally higher than in October and edged slightly above a year ago. But they remained below the postwar peak for November established in 1957. Since August, shifts have averaged less than 1 per cent a month.

The failure rate, rebounding from the drop in October, rose to 55.4 per 10,000 enterprises listed in the DUN & BRADSTREET *Reference Book*. It came close to the 55.9 casualty rate in November last year.

In most size groups, casualties ran higher than October, boosting total volume to $53.2 million. More businesses with liabilities between $25,000 and $100,000 failed than in any month since July 1958. This was the only size group suffering heavier mortality than last year. The decline of failures in other size groups pushed aggregate liabilities 6 per cent below their 1958 level.

Construction and wholesaling casualties climbed to their highest levels since January and June respectively, and service tolls edged up slightly. A considerable increase occurred among general builders. The wholesaling rise centered in the food and automotive parts trades. On the other hand, fewer manufacturers and retailers failed than in the preceding month. Tolls in most

continued on page 14

THE FAILURE RECORD

	Nov. 1959	Oct. 1959	Nov. 1958	% Chg. †
DUN'S FAILURE INDEX*				
Unadjusted	57.1	48.0	57.0	+0.2
Adjusted, seasonally	55.4	50.5	55.9	—1
NUMBER OF FAILURES	1130	1125	1121	+1
NUMBER BY SIZE OF DEBT				
Under $5,000	147	144	158	— 7
$5,000—$25,000	504	552	528	— 5
$25,000—$100,000	369	348	321	+15
Over $100,000	110	81	114	— 4
NUMBER BY INDUSTRY GROUPS				
Manufacturing	195	221	190	+ 3
Wholesale trade	124	106	108	+15
Retail trade	520	532	550	— 5
Construction	186	164	176	+ 6
Commercial service	105	102	97	+ 8
LIABILITIES (*in thousands*)				
CURRENT	$53214	$50376	$56718	— 6
TOTAL	53294	51336	57393	— 7

*Apparent annual failures per 10,000 enterprises listed in the DUN & BRADSTREET *Reference Book*.

†Percent change, November 1959 from November 1958.

In this record, a "failure" occurs when a concern is involved in a court proceeding or in a voluntary action likely to end in a loss to creditors. "Current liabilities" here include obligations held by banks, officers, affiliated and supply companies, or the governments; they do not include long-term publicly held obligations.

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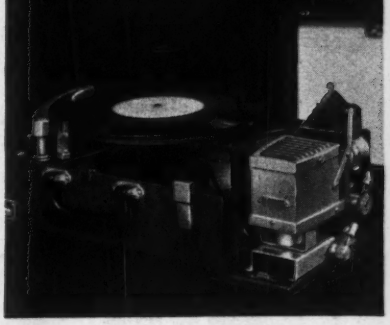

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retail lines turned down or held steady. In manufacturing, casualties fell off in the food, lumber, and steel industries.

In all types of operations except retailing, failures exceeded year-earlier levels. The least change—a 3 per cent rise—took place in manufacturing, where increases in apparel, machinery, and transportation equipment offset declines in other industries. Wholesalers suffered the sharpest upswing, 15 per cent, mostly in food and building materials. The contrasting retail decline from last year prevailed in all trades except apparel, building materials, and drugs.

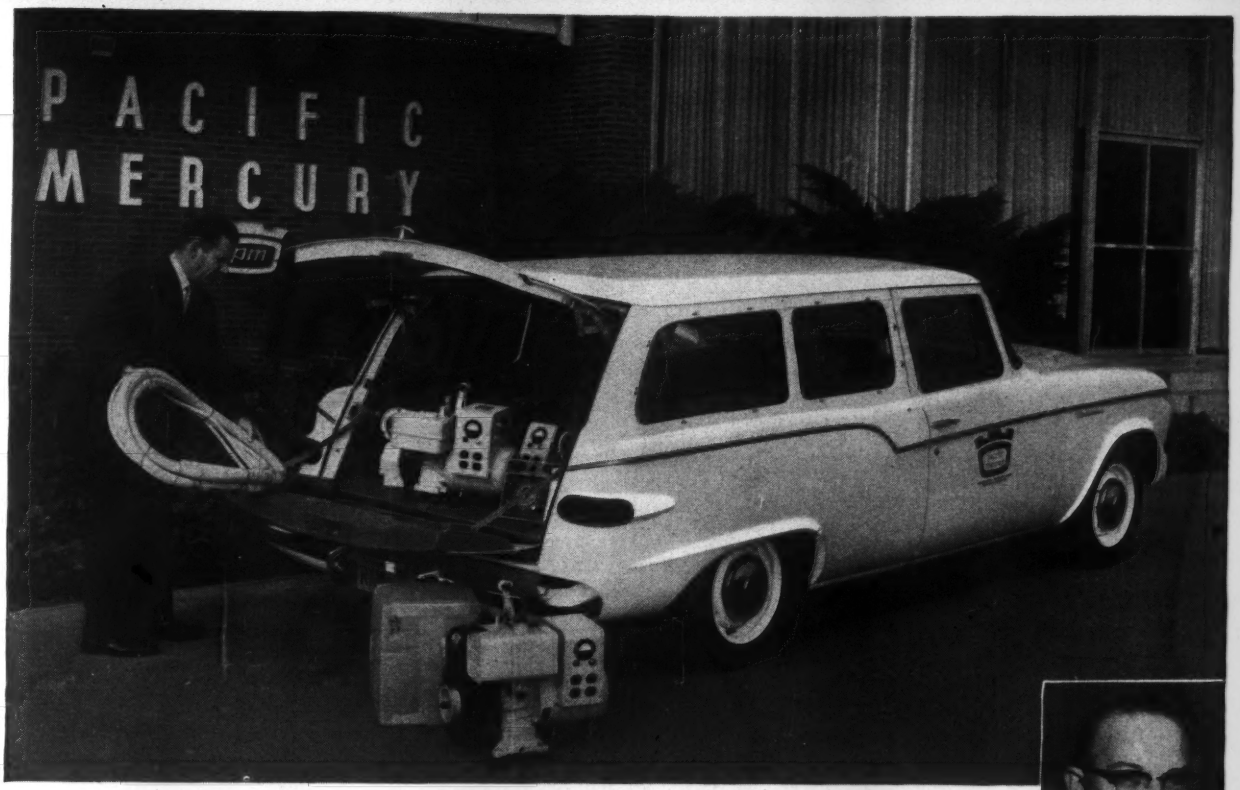
Geographically, the October-to-November increase was concentrated in three regions—the New England, South Atlantic, and Mountain States—and occurred in non-metropolitan districts. Among the regions with lighter tolls, the East North Central States had the fewest failures for any month since January, largely because of marked declines in Illinois and Michigan.

FAILURES BY DIVISIONS OF INDUSTRY

	Cumulative total (Eleven Months)		Liabilities in million $	
	1959	1958	1959	1958
MINING, MANUFACTURING..	2234	2495	183.9	227.2
Mining—coal, oil, misc..	78	79	7.2	17.2
Food and kindred products	165	180	13.7	16.4
Textile products, apparel.	372	463	21.2	31.7
Lumber, lumber products.	454	495	22.7	29.8
Paper, printing, publishing	150	172	8.4	8.2
Chemicals, allied products	57	59	4.2	3.9
Leather, leather products.	67	92	6.5	12.4
Stone, clay, glass products.	48	60	4.1	10.5
Iron, steel, products.....	125	165	13.7	16.6
Machinery.....	225	264	37.5	27.7
Transportation equipment	98	69	7.8	15.2
Miscellaneous.....	395	397	36.9	37.6
WHOLESALE TRADE.....	1268	1313	73.4	71.4
Food and farm products..	265	307	21.5	18.3
Apparel.....	39	59	1.6	2.7
Drygoods.....	34	43	1.2	1.3
Lumber, bldg.mats., hdwre	138	164	8.8	11.7
Chemicals and drugs....	58	45	1.6	1.2
Motor vehicles, equipment	69	61	3.2	1.9
Miscellaneous.....	665	634	35.5	34.2
RETAIL TRADE.....	6395	6999	213.4	210.9
Food and liquor.....	1037	1041	28.0	23.7
General merchandise....	266	270	15.8	11.0
Apparel and accessories..	948	1080	37.8	28.5
Furniture, furnishings...	770	987	33.1	42.7
Lumber, bldg.mats., hdwre	420	464	14.3	14.6
Automotive group.....	923	1014	24.2	36.2
Eating, drinking places...	1233	1335	33.4	35.4
Drug stores.....	111	154	2.9	3.8
Miscellaneous.....	687	654	24.2	15.0
CONSTRUCTION.....	1901	1986	111.4	105.1
General bldg. contractors.	686	811	62.7	56.5
Building subcontractors..	1069	1065	38.4	37.7
Other contractors.....	146	110	10.3	10.9
COMMERCIAL SERVICE.....	1175	1089	51.1	56.7
TOTAL UNITED STATES.....	12973	13882	633.3	671.2

Liabilities are rounded to the nearest million; they do not necessarily add up to totals.

This report was prepared in the Business Economics Department by Rowena Wyant.



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WASHINGTON Business Front

JOSEPH R. SLEVIN

» *Girding for a second-session battle for campaign issues, Democrats face a tough, veto-wielding President.*

» *Any liberal spending schemes will hit a formidable double roadblock: good times and a solid conservative coalition.*

» *In this election year, look for politicians to seize on any hint of a budget surplus as grounds for a tax cut.*

WASHINGTON, D.C.—A Republican President who wants a stable dollar and a Democratic Congress that wants 1960 campaign issues are beginning a six-month tussle that will end just before the Democratic National Convention meets in Los Angeles next July. This is the same Congress that roared into Washington with visions of glory in January 1959 and then crept home in September, a subdued and chastened lot. It had the biggest Democratic majorities since the New Deal, but it did little to enlarge the welfare state, passed no important anti-business legislation, and gave labor the back of its hand by enacting the tough Landrum-Griffin anti-racketeering law.

There is no reason to expect that the legislators will act much differently in their second session than they did in their first. The central group of moderates who hold the controlling power on most issues again will be in the saddle under the leadership of the two middle-of-the-trail Texans, House Speaker Sam Rayburn and Senate Majority Leader Lyndon B. Johnson. A reborn coalition of Republicans and Southern Democrats that upheld eight out of nine Presidential vetoes during 1959 quite certainly will remain an effective working partnership. And the resurgent President who signed the vetoes and dominated the first session of the 86th Congress will be flexing his muscles just as vigorously in coming months.

Prosperity stalls the liberals

The painful fact facing the more liberal Democrats is that conditions are not right for the development of their kind of issues. The country is prosperous, which rules out the big economic measures they had hoped to pass in the wake of the 1958 recession. Most of their colleagues are moderates, which makes it difficult for them to enact the broad social legislation that the Democrats believe distinguishes their party from the Republicans.

Ike takes command

Then, too, there is President Eisenhower. The "modern Republicanism" he once espoused is dead, and he now is wedded to the "stable dollar" that he embraced in late 1958 and valiantly defended throughout 1959. That means stonewall resistance to new or bigger Federal spending programs that might add to inflationary pressures by unbalancing the budget. It means that Democrats who advocate larger Government outlays will risk being tagged with the "spenders" label they learned to fear and detest last year.

Mr. Eisenhower is beginning this session as a far more formidable adversary than he appeared to be at the start of the 1959 session. He has demolished the myth that the 22nd Amendment's two-term limitation inevitably must weaken the Chief Executive during his final 24 months in office. He has the fresh memory of his 1959 triumphs and the new knowledge that he can effectively use formal White House statements, news conferences, and special radio-TV speeches to arouse wide public support for his programs.

The function of the true conservative is to consolidate the advances that have been registered by the liberals. That, in essence, is the course Mr. Eisenhower is following. He will put no bold initiatives before Congress this year but instead will pursue a hold-the-line policy designed primarily to pare a little here, attain efficiencies there. Mr. Eisenhower is essentially a cautious man who believes that the Federal Government should be smaller, not bigger. He would much prefer to see it get rid of some of its existing responsibilities rather than take on new ones. He has not been an innovator during the past seven years, and there is no reason to expect that he will change character during the final twelve months of his administration.

About the only exception to these generalizations may be Mr. Eisenhower's continuing attempt to achieve freer markets for agricultural products. He has made some progress, and he would like to be able to persuade Congress to go still further. At the moment, the odds appear to be against him.

Mr. Eisenhower will touch off another major hassle when he renews his demand that Congress repeal the 4¼ per cent interest rate ceiling on Government bonds that mature in five years or more. Congress refused to

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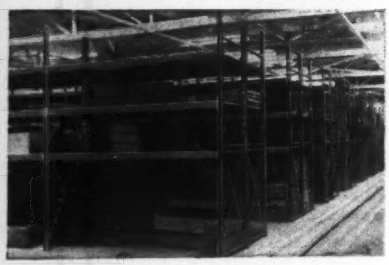

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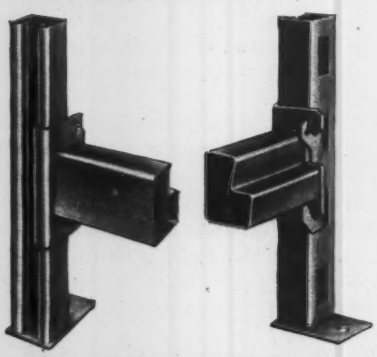

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grant the request last summer and used the White House proposal as a springboard for a slashing attack on Administration-Federal Reserve Board credit restraint policies. The Democrats think the 4¼ per cent recommendation gives them a chance to tag the Republicans with a "high interest rate" label, and they intend to exploit the opportunity to the full.

Round two coming up

Another controversial Administration request will be laid before Congress when Mr. Eisenhower renews his unsuccessful 1959 demand that the lawmakers wipe out the Post Office deficit by raising postal rates. The President will have to ask again for a temporary increase in the $285 billion public debt ceiling, and the Democrats again will obtain what political advantage they can from stressing that the debt has grown $13 billion during the Eisenhower Administration.

The President will press for the adoption of a number of proposals that he unsuccessfully submitted to the last session of Congress. They include a wide variety of technical economy measures, higher interest charges for many types of Federal loans, several suggestions for toughening the antitrust laws, revision of the Employment Act of 1946 to make price stability an explicit goal, and extension of coverage of the minimum wage law.

But the bitterest Congressional battles will center about legislative proposals that will be put forward by the Democrats as their liberal members seek to broaden the social responsibilities of the national Government.

The liberals are chafing under the Johnson-Rayburn leadership, and they will press much harder this year than they did in 1959 for the enactment of more generous social programs, which they believe will enhance their own voting records and give the Democrats a stronger program to take into the fall election campaign.

There will be pressure for increased social security benefits and for a medical insurance program within the social security system. Federal aid for school construction and for teachers' pay is high on the list of the liberals' "must" bills, and so is an increase in the $1 minimum wage. There will be renewed demands for Federal unemployment compensation standards, for

a program to help chronically depressed areas, and for a bill to make it easier for communities to finance public facilities.

The tight money issue

Democratic criticism of Administration "high interest rate" policies will be coupled to attacks on tight money. A number of Democrats have served notice that they will fight for measures to soften the impact of tight money on home building.

If the liberals are more successful this year than they were in 1959, Mr. Eisenhower's veto weapon will come into heavy play. It takes a two-thirds vote in each house to override a veto. Despite the huge Democratic majorities, the arithmetic indicates that Mr. Eisenhower's vetoes will stand up as well in 1960 as in 1959.

Tax Fight Looms

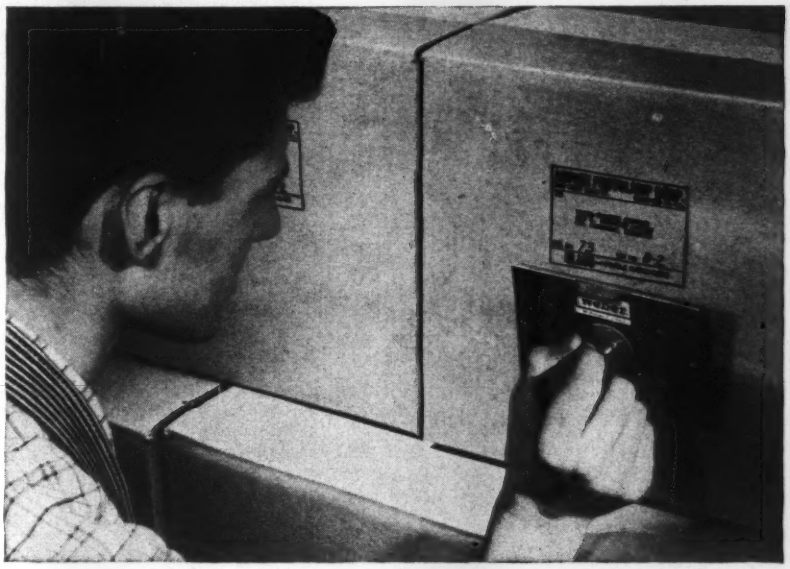
It doesn't seem likely now, but there still could be a tax-cut battle before Congress hits the campaign trail.

There are many possible gimmicks. Suppose that a $2 billion fiscal 1961 surplus is in prospect by June. Some lawmakers—and some high-ranking members of the Eisenhower "team"—will decide that it would be good politics to enact a $4 billion tax cut to take effect January 1, 1961. Only half would come out of fiscal 1961 revenues, since the fiscal year ends on June 30, and that half would be paid for by the $2 billion surplus. Presumably, a continuing rise in revenues—if there is no recession—would assure the Government of the full $4 billion that would be needed to prevent a deficit in fiscal 1962.

The tax-cut pressures could sorely test all Mr. Eisenhower's frequently declared devotion to reducing the public debt before any revenues are used to trim taxes.

Profit Picture Cloudy

Top Administration economists are beginning to fear there will be a profit squeeze later this year. Productivity won't rise as it did immediately after the recession. Wage rates and other costs are continuing to climb, and it will be difficult for some corporations to pass along their heavier costs in higher prices. A profits squeeze would cool the enthusiasm some companies have for plant expansion, would add to the pressure for modernization in other instances. END



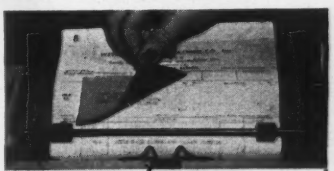
Just "touch" the carton and there's your label

Weber Touch-Stenciling—the fast easy way to address multiple carton shipments...

No more stencilboards, rubber stamps or label typing. Instead, you can print facsimile labels directly on cartons with just a "touch" of a Web-O-Print hand duplicator.

Stencils are pre-cut to duplicate your label. Customer's name and address or product information is filled in on a typewriter or by hand. Then slip the stencil on the handy duplicator and touch-stencil all the cartons in the shipment. The duplicator leaves a clean, sharp print that will not fade, rub or wash off.

It's so easy to do. With a smooth, one-hand motion 40 to 50 cartons can be addressed in a minute. The duplicator holds enough ink for several thousand impressions and it prints anywhere — cardboard, wood, paper, smooth or rough, round or flat surfaces. After the shipment has been addressed the stencil is thrown away, saving filing time and space.



FAST, EASY. Stencils are pre-cut to your specifications. Type or handwrite in the variable data and slip on duplicator. Takes just seconds to change stencils for each order.

Send for free bulletin on Weber "Touch-Stenciling" methods. Packed with ideas on addressing and marking multiple shipments.

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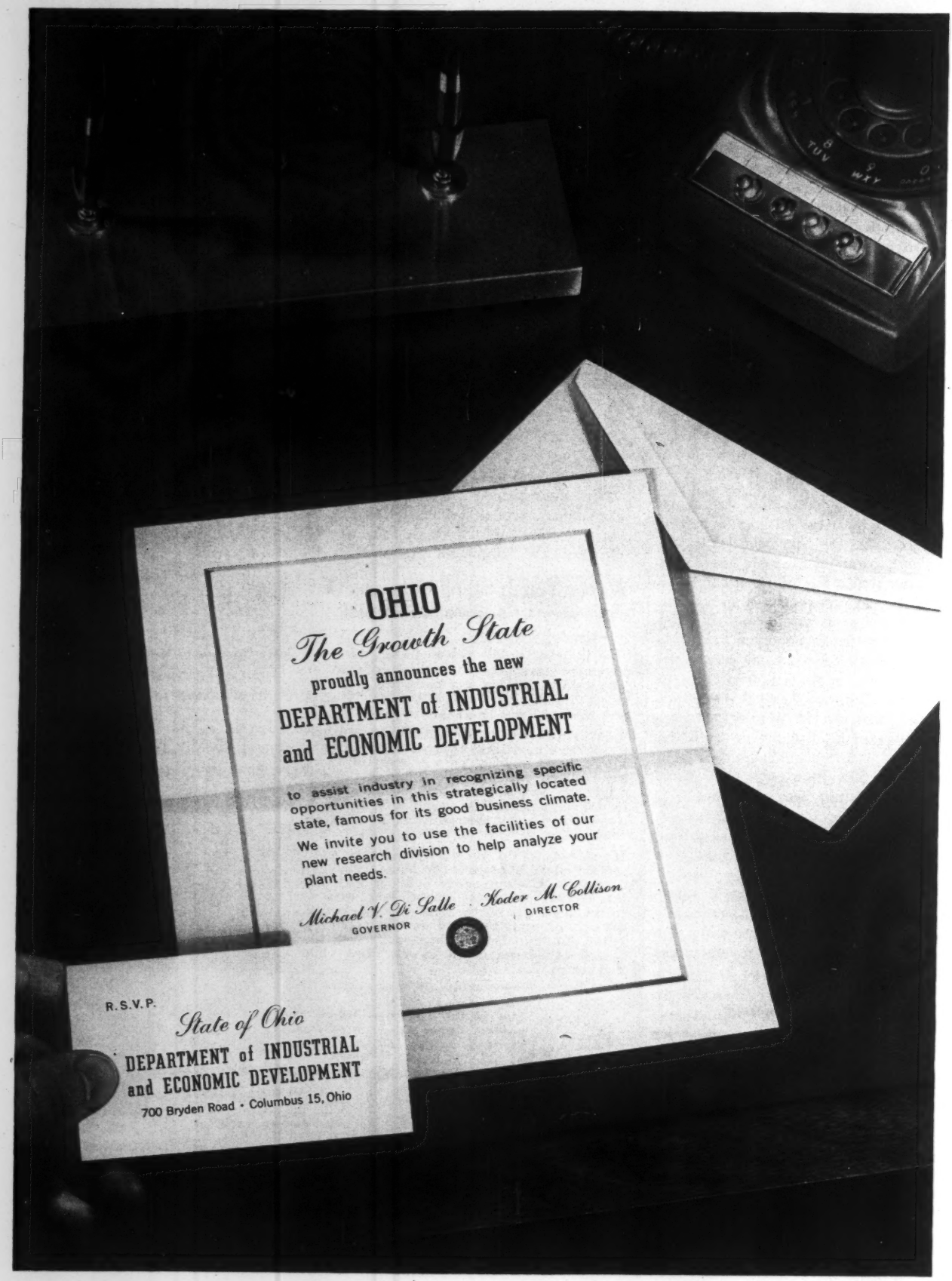
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Voice of Industry

Capital Spending in a Year of Growth
Unequal Struggle in Steel
Foreign Competition: A Job for American Business
Meeting Human Needs in a Scientific Age

WILLIAM F. BUTLER, *vice president—economic research, The Chase Manhattan Bank of New York.*

Building for Tomorrow

Although there will be plenty of tough problems ahead, I think we can expect an upward movement in business expenditures for new plant and equipment that could extend through 1960 and, perhaps, through 1961 as well.

An 18 per cent rise in total business fixed investment—the GNP concept—has been projected for 1960. This would imply an increase in the Commerce-SEC plant and equipment total from about $32.8 billion in 1959 to about $39 billion this year. Allowing for some lag in early 1960 as a result of the steel strike, this implies a change from fourth quarter 1959 to fourth quarter 1960 of almost 30 per cent.

Profits after taxes in 1960 might run about 10 per cent of the depreciated stock of capital in use. This is about the same rate of return as in 1955. It would appear high enough to justify corporate investment even in the face of high interest rates.

The last two periods of expanding capital investment have lasted about two and a half years from their lower turning points and have shown a decided leveling out for three or four quarters before the downturn. This experience would point to a downturn in capital expenditures and general business sometimes in 1961 and perhaps about mid-year. It is possible, however, that the prospective expansion could develop in a manner that would achieve a better balance between saving and investment, costs and prices, expansion vs. modernization expenditures on the investment front and the growth in debt vs. the growth in assets. Thus, this period of prosperity and growth could last longer—perhaps through 1961.

From a speech before the National Industrial Conference Board.

R. CONRAD COOPER, *executive vice president—personnel services, United States Steel Corp.*

Power and Principle

The issues at stake in the steel negotiations involve deeply held matters of principle, the ultimate determination of which will vitally affect the competitive future of the industry, its

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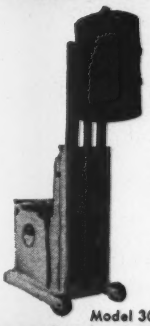

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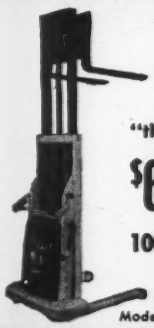

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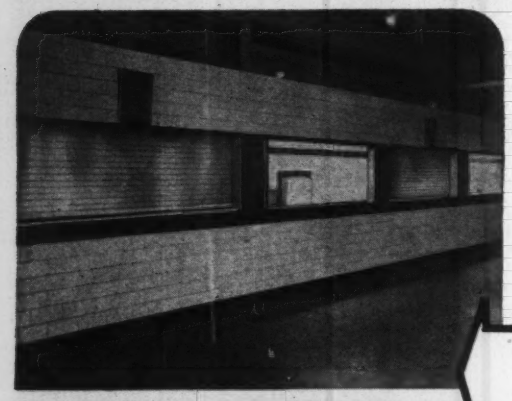

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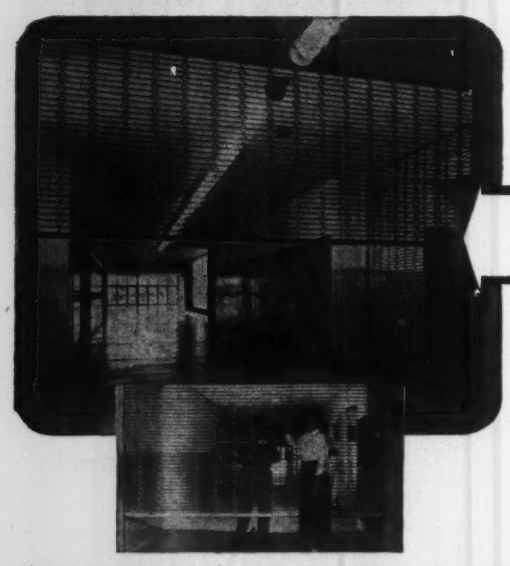
The vertical "coil-away" action of the *Kinnear-originated* curtain of interlocking metal slats is the ideal counter shutter. Its space-saving efficiency and protection have been proved in service openings of every kind. In addition to a variety of contoured slats, Kinnear also offers the popular "midget" slat, with a flat exterior face, specially designed for counters up to 20 feet wide.

and

Kinnear Rolling Grilles



The Kinnear Rolling Grille, an attractive openwork of metal bars and links, is also widely used as a barricade for counters, doorways, corridors, or to confine activities to sections of any room or building area. It features the same, space-saving, coiling upward action of the Kinnear Rolling Doors and Counter Shutters.

Kinnear Counter Shutters or Grilles — easily raised or lowered from inside — clear the entire opening . . . coil out of the way . . . never block light from above . . . leave all counter and wall space clear and usable at all times. In outdoor installations, wind can't slam or damage them. There's extra value in their **all-metal** protection against intrusion, pilferage or vandalism. Built of aluminum, steel, or other metals if desired, to fit openings of any size, in new construction or completed buildings. Write for further details.

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customers, its workers, its owners, and the whole American people.

It is not—as negotiations so often are—a matter of bickering over a few pennies and ultimately splitting the difference. The pennies in this case are really 17-million-dollar pieces, for that is what each cent of increased wages will cost the steel industry in a single year.

And there is no way of splitting the difference between an inflationary and a non-inflationary agreement. In the end, it must be one or the other. It must either preserve or impair our competitive position, for it cannot do both; and it must perpetuate wasteful practices or eliminate them.

Such controversies cannot be settled by knocking a few supposedly stubborn heads together. Nor can they be brushed aside by those who would call down "a plague on both your houses" and urge the Government to act accordingly.

This is not a struggle between two giant forces of equal power, as it is so often depicted by clever cartoonists. It is a dispute between two parties having unequal powers. On the company side, there lies only the power to say no to demands which it cannot accept—and to suffer the beating it may take in consequence.

From a speech before the Virginia Manufacturers Association.

J. PETER GRACE, *president, W. R. Grace & Company.*

The Export Dilemma

American business men realize that the job of promoting American exports is primarily theirs to do. The challenge lies in stopping the downward trend of our exports and re-establishing America's position in foreign trade.

To sell more abroad, we will have to make our prices more competitive

by further increasing the rate of productivity of our labor and by cutting production costs. This is, of course, the problem at the heart of most of the current labor-management disputes. Unless management retains (and in some cases regains) the right to manage, we will continue to be outclassed in productivity.

At the same time, we must continue to work toward an expanding balanced multi-lateral world trade. If we try to take the easy way out by raising tariffs and establishing more quotas, we will do more damage to our world prestige than billions in aid will ever repair.

From a speech before the National Foreign Trade Convention.

M. J. RATHBONE, *president, Standard Oil Company (New Jersey)*

What of Man?

I could spend hours cataloging what research and inventions promise us in the next 50 years. But, as wonder is piled upon wonder, a question creeps in. Where is man in this picture? Has he been able to cope with the problems that scientific progress has brought?

Clearly, the combination of rising economic expectations, the inflation of population, and the perfection of ever-more rapid and effective means of communication will accentuate unrest and develop tremendous international problems.

Some of our greatest future needs will be of social and political innovation. If we are to gather the fruits of science and technology, we will have to cope with the broader issues they are so insistently raising. We will have to stretch our minds to meet the demands of what is, in fact, an entirely new human situation.

From a speech before the Baton-Rouge (La.) Council of Engineering and Scientific Societies.

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And yet, with all this training, Burns Guards cost you less—upwards of 20% less than your present guard force payroll!

The reason: With Burns Security Service, you don't pay for such costly guard necessities as uniforms, sidearms, overtime, social security, vacations, insurance costs or other fringe benefits. Burns pays for all of this—and provides you with 'round-the-clock supervision, too!

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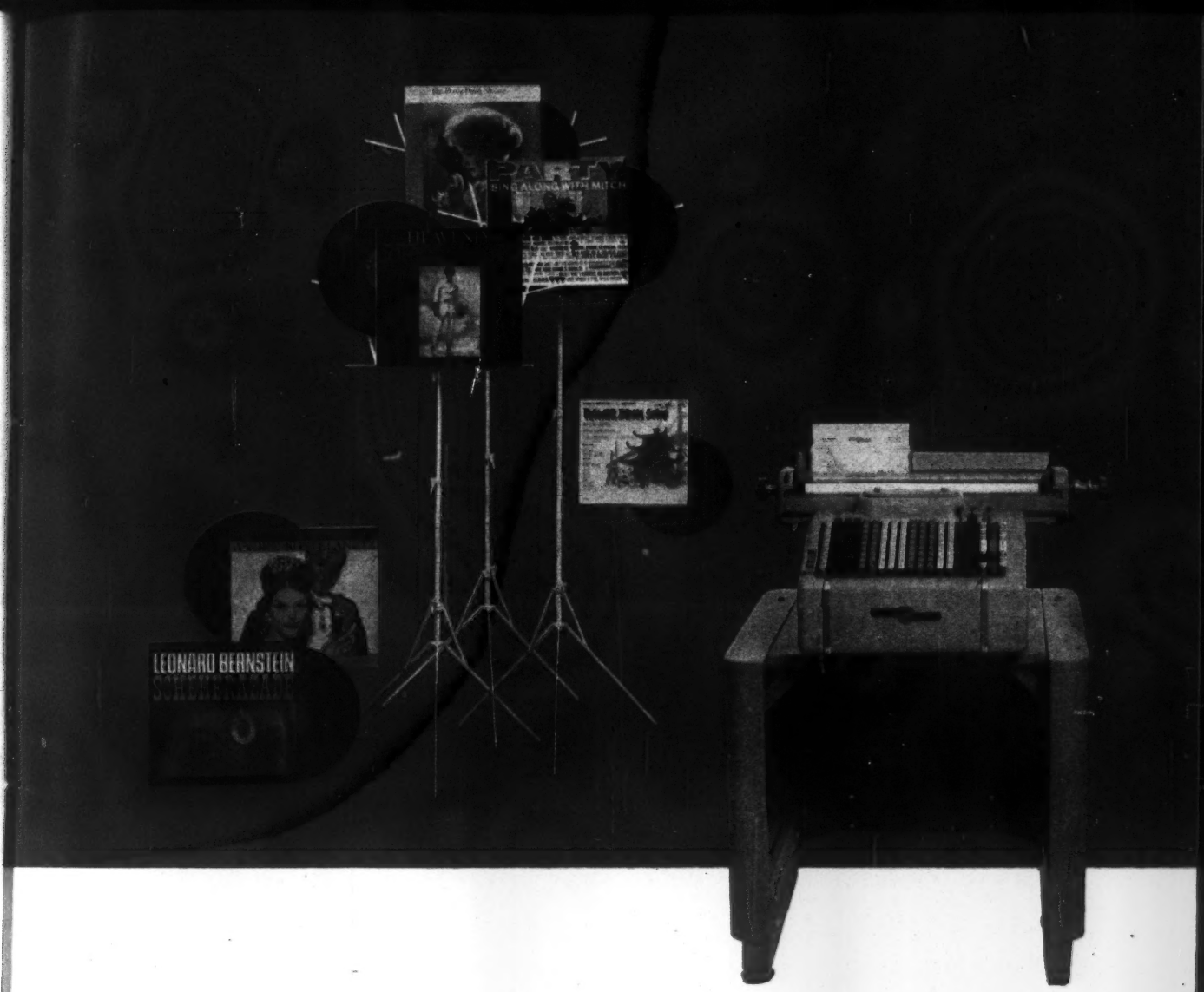

Burroughs Data Processing Input Equipment lowers accounts payable costs 40% for *COLUMBIA RECORDS*

Just eleven years ago, Columbia Records, a division of the Columbia Broadcasting System, Inc., pressed the original (lp) and triggered a sales curve that climbs higher and higher every year.

While the continuing upswing was sweet music to Columbia's ears, it struck a dissonant note in Accounts Payable. Namely: how to retain rigorous control over payments with an ever-increasing workload. Solution? Burroughs Accounting Machine to Punched Card equipment, a system that produces hard copy records and punched cards simultaneously. And the change paid off immediately.

As Controller W. G. Wilkins puts it, "Our Burroughs Data Processing Equipment turns out checks, vouchers and corresponding punched cards with great speed and accuracy. As a result, we have vital records and reports at our fingertips when we need them. Although our workload increased, Burroughs decreased our operating costs 40% on the Accounts Payable operation."

Astute management control hinges on split-second decisions—decisions that demand the most current figure-facts. Burroughs delivers them as they happen with equipment that ranges from modern accounting machines through advanced electronic computer systems.

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Corn yields something for everybody

...and commercial banks help finance its many uses

Whether you wander the uplands in autumn or stay close to city streets, you can count as many blessings from corn as an eating ear has kernels.

Breakfast food to jet plane fuel, corn in its natural state, and corn-plus-chemistry create a fuller life for you.

And commercial banks do their part to make it so.

Loans from banks help farmers seed, tend and harvest corn. Loans help private companies process each season's yield into food and grain . . . by-products and synthetics. And frequently it's a bank loan that puts up the cash for machinery that transforms common corn into golden new products.

As the leading lender to business and industry, The Chase Manhattan Bank of New York is proud of commercial banking's contribution to agricultural and industrial progress.

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Branch manager wants secretary –frequently!

"He isn't a bad guy to work for, except for one thing. He dictates a bulletin for dealers, from three to eight pages, every Thursday. A letter shop delivers 750 copies late Friday afternoon. It would be darn near seven before I finished mailing the bulletins . . . Which is why he needs a new secretary so often!"

If mailings disrupt work schedules, bring on crises, run into overtime, you should have the new Pitney-Bowes Model 3300-FH—a small, low cost combined folding and inserting machine.

The 3300-FH will fold and stuff into envelopes 500 single sheets in 8 minutes. Additional enclosures are made by another run through the machine.

The 3300-FH handles letters, cards, invoices, leaflets, even stapled sheets.

It is easy to operate, can be set by anybody, without tools, in less than a minute. The inserter unit can be used separately or attached to any Pitney-Bowes folding machine.

For daily or infrequent mailings, this folding and inserting combination is a real convenience, and a great time, cost and morale saver in any office. It speeds up mailings, permits one girl to do the work of several, and more efficiently.

Call any PB office for details. Or send coupon for free illustrated booklet and case studies.

The larger Model 3100 Inserting Machine, with up to six stations, stuffs as many as six enclosures at speeds up to 6,000 an hour. And can be attached to a PB postage meter mailing machine.

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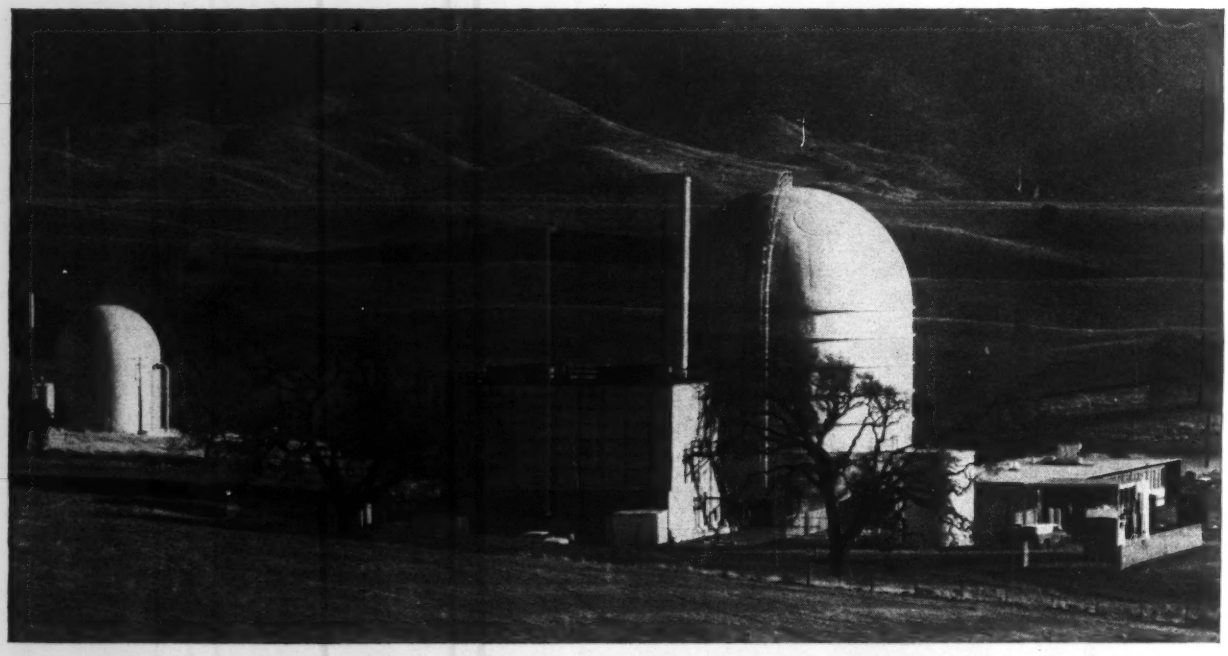
Soon...Cheaper atomic power



General Electric Vallecitos Atomic Laboratory. Here, in California's Livermore Valley, U.S. Steel sponsors the first large-scale, privately financed study of radiation effects on steel. Project will hasten the advent of low-cost atomic power.

This G.E. technician adds a touch of glamour to the serious business of making a radiation count on foil samples removed from General Electric Test Reactor. She works in a mobile lab made available to the project.

with USS Atom Age Steels

BEFORE ATOMIC POWER can light our cities or run our industries efficiently, the cost of building and operating commercial atomic reactors must be reduced. The two big problems: high cost of nuclear fuel, and the need for better and less costly materials of construction.

Firsthand information on the effects of radiation on steel has not been easy to come by. The start-up of the General Electric Test Reactor, near Pleasanton, California, and the Westinghouse Testing Reactor near Pittsburgh has enabled U.S. Steel to launch the first large-scale private investigation of irradiated steels. These explorations will be carried out in private test reactors, wholly financed with private capital.

Today, U.S. Steel has scientists working full-time at Westinghouse and General Electric Atomic Laboratories; extensive applied research in nuclear steels is also being carried on at U.S. Steel's Monroeville Research Center.

From these tests will come new and improved atom age steels: stronger, more corrosion-resistant steels, steels that will hasten the advent of commercial nuclear power. The full effects of this vast U.S. Steel research program may not be felt for two, five, or even ten years. But, cheaper atomic power is on its way . . . because American industries like U.S. Steel are contributing to the research. United States Steel, 525 William Penn Place, Pittsburgh 30, Pa.

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USS United States Steel

Clayton McDole, U.S. Steel scientist (second from left) supervises the removal of irradiated foil samples from General Electric Test Reactor. Information obtained provided a solid flux data foundation for the irradiation research of special reactor steels.

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DUN'S REVIEW
AND MODERN INDUSTRY

NEW CHEMICAL ADVANCES:

What They Mean for Your Company

Right now, in the laboratories of the chemical industry, work is under way that will revolutionize many familiar products, spell new profit opportunities for alert companies. Here is an up-to-the-minute report by leading chemists on these advances and the promise they hold for your company.

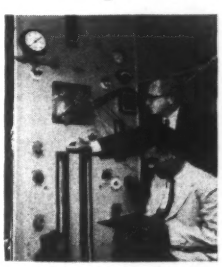
CHEMICAL RESEARCHERS and the industries that support them are engaged in a mighty assault on the status quo. Their facility in breaking up the natural orchestration of atoms and then rearranging them in ways useful to industry and mankind in general is one of the great forces behind the coming upsurge in industrial growth.

To chart the chemical developments destined to upgrade certain industrial processes and remake familiar products, DUN'S REVIEW surveyed by questionnaire and personal interview leading chemists here and abroad. Chemists in industry, in universities, and in independent research organizations were asked to evaluate known laboratory projects and products, now in the pilot-plant stage, which will find their way to the commercial market within three to five years. (Although they will have important indirect effects on all industry, pharmaceutical advances were not considered in this survey.)

Of all the chemical advances mentioned, the one the experts are most enthusiastic about is the fuel cell. A laboratory curiosity for 150 years, this device for converting chemical energy into electricity without any moving parts is now rapidly approaching commercialization.

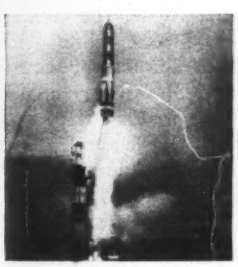
The incentive to all the foreign and American chemists and chemical engineers to perfect it is strong: in contrast to the meager 40 per cent top efficiency of the biggest, most advanced heat engines, the fuel cell converts 70 per cent or more of the input energy into electricity.

Experts Call These the Biggest Chemical Advances Affecting Industry

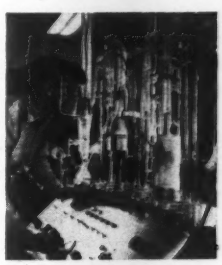


Fuel cell . . .

water conversion . . .



new fuels . . .



new metals . . .

new plastics . . .

Pictures of Progress: Left to right, an experimental tractor powered by Allis-Chalmers fuel cells; seawater, new hope for arid lands; a Martin Titan taking off at Cape Canaveral; a billet of columbium (niobium) in a forge at Du Pont's Experimental Station; and an Allied Chemical researcher studying properties of a new plastic determined by electronic instrumentation.

The fuel cell will mean:

- electrical industrial trucks that need no recharging
- on-site power for construction and relay stations
- auxiliary power for motor vehicles

Chemical conversion of seawater will make possible:

- new plant sites in arid areas
- relief from the water shortages at present plant sites
- the elimination of stream pollution

WHAT CHEMICAL ADVANCES MEAN TO YOU

Within a few years, the experts believe the fuel cell will stimulate radical changes in such familiar industrial equipment as welding machines, in-plant vehicles, cars, and trucks. The first applications will be military, providing auxiliary power in space vehicles and for battlefield communications. The advantage of using fuel cells to power an electric fork-lift truck, for example, is that since the source of energy for the fuel cell is external to it, the truck, unlike present electric vehicles, doesn't have to be pulled out of service after every shift to have its battery recharged or exchanged. One experimental fuel cell called the "Hydrox" already has run a fork-lift truck in England.

Power for the future

Engineers are already dreaming of the fuel cell as the main engine in cars, trucks, and locomotives. They have calculated that a 36-hp fuel cell could do the same job as a 300-hp internal combustion engine in a car of average weight. The fuel cell would provide electricity for four motors, one driving each wheel.

Other useful industrial applications of the fuel cell are providing portable power at construction sites and "peaking" power for utilities (see page 71), and powering remote microwave radio relay stations.

The survey respondents foresee a vastly greater variety of plastics, which will have widespread applications, particularly in packaging and the metalworking industry.

Since the first plastic was developed a little more than 90 years ago, inventiveness has reached the remarkable level where chemists can create new plastics to order—with predictable properties.

Some of these new experimental plastics approach the common nonferrous metals in strength and melting point. Although today they are much costlier than their metal rivals, they can be formed to close tolerances so quickly that they offer industry important cost advantages.

The experts also see benefits for industry in the new metals now being developed in chemical laboratories. Actually, of course, there are no "new" metals. All of the stable elements in the Periodic Table have long since been isolated. However, many of them are available only in minute quantities or a useless impure form. It falls to the chemical industries, therefore, to find cheap ways of removing these shelved metals from the compound or "chemical" form in which they are hidden.

Leaders in chemistry have accepted the challenge and are now seeking ways of producing more and more useful columbium (called niobium by chemists), tantalum, molybdenum, rhenium, scandium, and other rare metals.

Even though many of these hitherto rare metals will be available in tonnage quantities, none will challenge steel or aluminum, according to the experts. Buildings and bridges will never be made out of scandium or rhenium. But each leap forward in technology generates situations where the special properties of some one of these metals uniquely fits the specification. On the leading edges of the stunted wings of vehicles that defy the law of gravity, in rocket nozzles, in the incandescent bowels of nuclear reactors, in minute transistors, these metals prove their mettle where conventional materials soon expire or gum up the works.

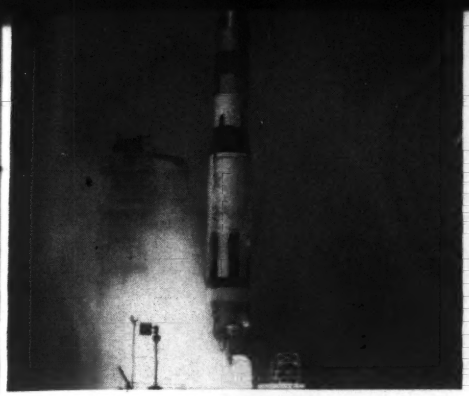
Once these new metals are available, the metalworking industry must figure out how to form them into useful shapes. Fortunately, the chemical producers are helping to solve these tricky fabrication problems. For example, techniques are being perfected for working rare metals while hot. Unfortunately, many of these metals are too brittle to form at room temperature.

In addition to commercial development of little-used metals, chemists are also working hard on "foaming" conventional metals. Bubble-filled metals have more rigidity for the same mass than their solid counterparts. The obvious application is in aircraft and missiles, but lots of other devices, such as machine tools, can utilize increased rigidity.

Air speed: 3,000 MPH

Air transportation may also be revolutionized by chemical developments, the chemists surveyed predict. Many of them foresee 3,000-mile-per-hour airliners. The key element in this advance is the fuel. Present-day fuels don't pack enough power for the passenger and freight planes of 1970. Chemical researchers are already creating some of these solid and liquid fuels for space vehicles.

As these fuels are made available for commercial craft, an even greater expansion and mobility of markets will be possible. The executive, for



Powerful new fuels will mean:

- lower-cost transportation, particularly air freight
- less dependence on overseas sources of fuel
- development of 3,000-mph airliners

The new metals will:

- resist corrosion and/or the extremes of temperature
- offer unusual possibilities when alloyed with or combined with present metals

The new plastics will be:

- high-temperature-resistant and capable of replacing some metals in plumbing, piping, bearings, and so on
- tailor-made to meet performance specifications

example, will be able to fly from New York to a business conference in Tokyo in two hours.

In five to ten years, the experts say, new chemical techniques for taking the "sea" out of seawater will be a vital force in countering the world's water shortage. Large areas in the United States and abroad are crippled by periodic droughts. As a result, industry is often unwilling to establish plants in these areas. Of course, manufacturing activities that depend on large volumes of water—such as chemical, food processing, oil refining, and metalworking—can't even consider areas plagued by water shortages. Present evaporation and distillation techniques for purifying brackish or salt water are costly.

Fresh water from the sea

But the chemical industry now has developed techniques, such as ion-exchange, which will sharply reduce the cost of seawater conversion when used on a large-scale. The experts envision large conversion plants (possibly powered by nuclear energy) pumping fresh water to arid regions miles from a salt water source.

Cheap water purification should also help companies avoid the pollution of nearby bodies of water.

These, in the opinion of the experts, are the five most important advances being made in the chemical industry today. However, they also sight these other developments of significance to industry ahead:

- New catalysts and cracking techniques for improving present fuels or for turning heavy hydrocarbons, such as asphalt, into usable fuels or plastics. Other catalysts are being developed to remove the dangerous elements in vehicle exhausts. They would permit wider use of gasoline vehicles inside factories.
- New high-temperature adhesives (see "Adhesives Pave the Way to New Markets," DUN'S REVIEW, March 1958, page 47). These adhesives are being developed to lower the weight of missiles. However, they should find many applications in all the commercial equipment that must withstand high temperatures.
- New anti-corrosion coatings and inhibitors should help cut an annual multibillion dollar loss.
- New synthetic rubbers with unusually long life. These raise the possibility of the car wearing out before the tires!
- New insulating materials. These will enable designers to conceive more compact electric motors that run hotter, which means greater capacity, too.
- New synthetic lubricants that can function over an enormous range of temperatures. Such lubricants will offer greater protection and life to industrial equipment.
- Advances in electrochemistry. They mean better storage batteries for electric industrial trucks and better plated protective coatings.
- Improved electronic materials. The new era in electronics is based on semi-conductor devices. These tiny transistors, diodes, and other components must be made out of metals whose chemically removed impurities are counted in parts per billion. Chemists have already learned to purify at these incredible levels.
- Supra-conducting materials. These could sharply cut the cost of and losses in long-distance transmission of electricity. Cheaper electricity for industry would be the first result.

Chemistry and the atom

Although the scientists were asked to confine their predictions to the chemical advances that directly affect industry in general, many of them cited the use of nuclear radiation in chemical processing. It is obvious such an advance would be of enormous significance to the budding nuclear industry. Instead of reprocessing or disposing of worn-out atomic fuels, their residual radiation might be applied economically to process familiar chemicals at less expense or to create entirely new chemicals.

An even more exciting prospect is combining power production and chemical processing in the same nuclear reactor. Both of these technical feats would help to lower the presently uneconomic cost of commercial uses of atomic energy. (See "What Price Atomic Power," DUN'S REVIEW, January 1959, page 37.)

The chemical progress outlined here is based on known experiments. However, many significant research projects are unquestionably going on in secret behind locked laboratory doors. How they will eventually affect industry is anybody's guess. Certainly, they make this report conservative in its estimate of the new products bubbling out of test tubes and creating expanded markets for industry.

—MELVIN MANDELL

The Coming Showdown in Labor

VICTOR RIESEL

A HOLLYWOOD comedian is writing a book slickly titled *In One Era and Out the Other*. That's prophetic. For that's the USA today on the industrial front. In one era and out the other—nothing more aptly describes what is happening as American labor and industry grapple with each other like wrestlers suddenly frozen on the TV screen.

This is the showdown. Whichever side wins will emerge as the dominant force in American life for many decades. Which will it be? Who knows? But no one really wins on the industrial front without winning on the political front. Today, no national strike can be successful without some Government support. No industrial complex, no matter how massive, can stand if it's pressured by Government. The side that influences the Government comes out ahead as we move into the third year of the space age.

Industry calls a halt

Will it be labor? Union leaders have been waltzing through easy industrial fights, each time coming up with a mighty prize. Now, they suddenly find themselves puffing and a little out of trim. In recent months, they have been leading intricate strikes, which they must now settle without the behind-the-scenes agreements and without the divide-and-conquer successes they rolled up in the past because a giant industry, or some part of it, was ready to sign up quickly with "the union."

Everywhere today, industry leaders have stolen the famed words of Ethel Barrymore, the late, great first lady of the theater: "That's all there is, there isn't any more."

Remember that American industry, for the most part, has yielded—sometimes graciously, sometimes after being pushed a little, sometimes after pressure from U.S. Presidents—for two decades. Now when it says, "That's all there is, there isn't any more," industry means that's as far as it can be moved by great unions. It doesn't mean that it can't or won't pay higher wages. It does mean that it will do so at its own pace.

The issue: managerial say-so

Industrialists in off-the-record conversations state that this is the time they have chosen not to move. They say this is their right. They say that they are battling to break the speed of spiraling costs and to recover their managerial say-so. But there is more. They also want to prove to themselves that they have the right to stand pat on their offers, just as unions stand pat on their demands. That is the crux of today's battle, not only in major industry but right on down the line into the tiniest shops.

Recently, there was a strange strike in the Midwest. A paper mill in the town of Ladysmith, Wis., was shut down over the issue of the employer's right to tell his workers to wear shirts in his factory. On August 20, some of the workers employed by the Peavey Paper Mill stripped to the waist in the hot weather. Management said, "Put the shirts back on, boys." Then without so much as another glance at the thermometer, more than 150 employees walked out in an unauthorized strike.

Local union officials of the United Paper Workers and the International Brotherhood of Pulp, Sulphite, and Paper Mill Workers conceded that the strike was an unofficial stoppage. A few days later, the men telegraphed the boss that they were ready to return to work with their shirts on. Fine, said the management. But it would not rehire the men who provoked the strike in violation of the written contract.

The union insisted that the company take back all the men. The employer insisted that the time had come for discipline and the establishment of the right to managerial say-so. The men had the right not to want to work in hot weather, it was said, but they had no right to strike in violation of the contract. They had no right to cause the company any losses by walking out.

Peace on management's terms

Finally, the men accepted their employer's terms. They wore shirts. Those who started the strike did not return.

Thus, in a small crucible, the issue of the quickie strike, the walkout, the wildcat, is boiled down. Few noted the Wisconsin paper strike—not with all eyes on the giant steel mills. But were the issues any different? No. The issues in giant steel were the same—managerial say-so, the responsibility for wildcat stoppages,

and the much-discussed inflation arguments.

No sense retelling the steel story here. Not when there is, for example, the waterfront, which so few people really watch. For years, the shipping associations have yielded to the demands of the International Longshoremen's Association on the Atlantic and Gulf Coasts.

Dockside dilemma

Then one day automation set in. The shippers began putting their cargo in metal containers. A ship could now be loaded in just a few lifts of bulk cargo instead of by strong dock wallopers hauling sacks and boxes on their backs as men had done since the Phoenicians.

Furthermore, a ship could now be built which would take these containers and fit them into grooves on the deck, as well as in the hold. A one-armed crane could roll alongside the vessel and load the containers. And there were now ways of taking sugar and coffee out of the sacks and pouring them right into the hold for shipment. This meant cutting down the size of loading gangs, sometimes from 23 to nine men.

The union was faced with the loss of some 20,000 of the 75,000 jobs all along the coasts. The companies were willing to study the situation and make other guarantees to help the men. But the union fought the mechanization. For the first time, the shipping companies stood pat. They were fighting for managerial say-so and the savings which would come from automation. The dockers struck. President Eisenhower had to get a Taft-Hartley injunction to put the ships to sea. The shippers won. There will be automatic loading.

Everywhere the issue is the same —in meatpacking, rubber, glass, copper, rails, commercial airlines, on barges in the inland waterways, in copper mines, and even in the construction of some missile bases.

When, for example, the United Packinghouse Workers Union struck eight Wilson & Company meat plants, it was after two months of negotiations. The men walked out after refusing to work more than seven and a half hours a day during negotiations. The company practice had been to keep its shop going ten to twelve hours on Thursdays. The company insisted on its regular practice and continued to keep most of its plants open with reduced staffs. It also broke off negotiations. Here again, the fight (which finally grew violent) was over managerial say-so.

Tempest in a coffee cup

To most of these strikes, industry reacted as did the supporters of a small Detroit coffee shop. There, a man named Walter Nau owned the Sno-White restaurant. The Hotel and Restaurant Workers Union attempted to unionize it. Nau refused to sign. He charged that the union did not represent a majority of his employees.

The union members then came in and sat for hours over a dime cup of coffee. Regular paying customers couldn't find seats. Business was bad. So Nau's friends, some 200 business and professional men in the Rosedale section of Detroit, organized a $10-a-cup coffee party which netted $1,890 for the restaurateur. This made up for his losses.

A tiny shop, but a big story—for it is really the story of industry's new tactics. When did all this management solidarity begin? Some say it began two years ago. The commercial aircraft industry has been whipsawed by many unions on the ground, in the airports, and in the air. These were and are honest unions. Their tactics were tough. The passenger carriers got together and decided to be just as tough. The unions had joint councils and worked together. So would the airlines, it was decided. They devised a mutual insurance system.

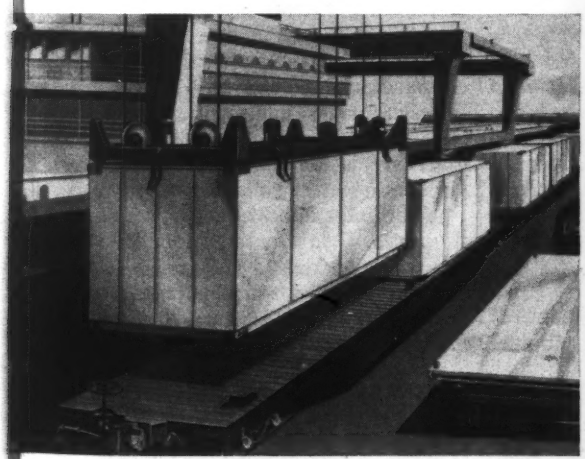
The airlines take a strike

They decided that if an airline were struck by a union or a joint council, the other carriers would reimburse the struck company with the extra profits earned on the same runs. Several lines were struck. The other carriers turned over hundreds of thousands of dollars to the paralyzed companies. This helped them take a long strike.

The legality of the agreement was questioned by the unions and other forces. The Civil Aeronautics Board ruled that so long as there was no collusion—that is, so long as the struck airlines did not say, "Go take your business to such-and-such a line"—it was legal for the airline companies to do what they wanted with the extra income resulting from the increased passenger loads.

There was no violation of the anti-trust laws.

This may have been the beginning of the showdown. Some say, however, that it really began back in 1955, when the International Union of Electrical Workers, led by James Carey, struck the powerful Westinghouse Electric Corp. No other big company, especially not General Electric, tried to pirate Westinghouse business while it was down. This was



FEAR OF THINGS TO COME: *Automatic cargo handling systems like this mammoth installation manufactured by National Malleable and Steel Castings (left) are producing fear of mass layoffs among dockworkers. International Longshoremen pickets (shown here with ILA President W. A. Bradley) recently tied up New York shipping during a walkout set off by the automation issue.*

the taking of "one long strike" in the electronics field.

There are those who believe the showdown should be traced to the 1957 automobile negotiations. Then, for the first time, the leaders of the big three auto makers—Ford, General Motors, and Chrysler—conferred on how to take the attack by Walter Reuther, leader of the United Automobile Workers union. At that time, Reuther demanded a share-of-the-profits contract—part of the profits to the white-collar workers, part to the stockholders, part to the workers, and part to the consumers in price rebates.

In 1961, Reuther will call again for such a contract. But in 1958, he backed down on that demand. Yet, there was a 50-day GM strike. Though little noticed, it was primarily due to the demands of the GM council of the auto union for a number of work-rule changes. Local grievances, they called them. But the issue was the same.

United they stand

Some time during the past two years, the railroad industry took a long look at the labor picture. Its own agreement on a moratorium with the well-organized and capably led Railway Brotherhoods was to expire on November 1, 1959. We are now familiar with what has happened since that date. But what happened inside the railroad industry before then?

A committee of the Association of American Railroads was appointed to study a system of self-insurance during strikes. Many plans were examined to ease the losses during a stoppage. Finally, they worked it out. They now have strike insurance. For a while, incidentally, when the steel industry thought that the union would use the strategy of striking just a few companies, some thought of using the railroad type of strike insurance.

The railroad strike insurance is complete. It is too intricate to describe here. However, it is significant because it shows that the railroads, too, are ready to take a long strike—that is, any one or two of them. That is the policy now. Take a long strike and get it over with. This seems to be the strategy of all industry. Why?

One of America's great economists put it this way to this writer recently:

"I believe you are right. Industry has decided to make a stand. But there are deeper reasons than many believe. Industry is where it was in the 1900's. Then it was about to introduce scientific management and mass production. The unions balked at the time-and-motion procedures. Industry, in order to survive and make profits, decided to take on the unions. This they did. The unions got hurt. Only when it was too late did the labor movement begin demanding compulsory arbitration. Just look at the record. That is what you'll find.

Crusading columnist **VICTOR RIESEL** *has won a national reputation by his exposure of graft and racketeering in labor unions. In 30 years of labor reporting, he has covered a world-wide beat, interviewed Presidents, world leaders, industrialists, and every important U.S. labor leader. His newspaper column is now distributed by the Hall Syndicate.*

"Now, the American industrialists have vast and costly automated machinery. The amount is fabulous. The steel industry alone has put in more than $12 billion in the past fifteen years. What use is it to install a new furnace, for example, which can produce 100 tons in an hour instead of eight, or a cooling process which can do in a minute what used to take an hour, or a system such as Kaiser has at Fontana which heats blast furnaces in 25 minutes instead of 29 days, if they still have to keep the same size workforce and cannot shift them around?

"So companies are fighting for managerial say-so. This is not popular with the rank-and-file. The union leaders realize that this is the moment of change. But, understandably, they can't sell it to the rank-and-file, which in many areas now is an older workforce and would have difficulty getting jobs. So they, the leaders, call for more and more fact-finding boards, more powerful fact-finders who will lead the way to stronger recommendations—public ones at that—which can save face for all sides."

Who will win? Nobody without a built-in Univac—a clairvoyant one at that—can predict. And then only if the Univac can tally next November's votes. The side that has the political power will come out ahead.

Modern strikes can't be won without the aid of the Government. No worker has been starved out. No steel striker has lost his home or his car or his refrigerator. No mill has been damaged. No company has attempted to operate in the face of a listless two-man picket line.

The people will decide

There is no test of strength. There is only a test of public opinion. And political leaders, being what they are, follow the polls, study indignation charts, and measure moods more carefully than a Madison Avenue executive picks his first gray flannel suit.

Thus, there will be a holding operation, for the most part, through the early months of 1960. The Government will patch up the industrial front as best it can—with special laws, special pleading, and special pressures on both sides. Then, after the election, will come the definitive policies.

If a friend of labor goes to the White House, then the big unions will win the next ten rounds of in-fighting—ever-higher wages, ever-widening influence on work rules, ever-increasing easing of Government regulations.

If the next President of the United States is a stricter disciplinarian and is elected over the hue and outcry and funds of labor, then there will be a deadlock. Unions will settle for smaller gains and strike less frequently.

There is too much zeal expended in seeking esoteric solutions or deep "underlying motivations" for the struggle. Don't get profound. The unions want more. They want fewer of their men laid off. The companies are worried by the impact of a renascent world and especially Soviet competition. They want to give less.

Only the referee—the man in the White House—can hand down the decision. END

The Myth of Communications

CLARENCE B. RANDALL

Like other callings, business management has built up its own particular fables and folklore. Often these myths are the product of fads and fashions that have taken root in management practice; sometimes they are half-truths or attractive oversimplifications. Though they are obviously no help to sound business practice, most of us are influenced by them to some degree.

It's never pleasant to have one's pet ideas exploded, but facing up to reality occasionally can be both healthy and profitable. No one is better qualified to puncture these managerial myths than Clarence B. Randall, business statesman and philosopher who retired from a notable career in industry to devote himself to Government service. Readers of DUN'S REVIEW *are already familiar with Mr. Randall's provocative approach to business problems. Now, in a series beginning in this issue, he turns a critical look on the fables and fallacies that make up the folklore of management today.*

AN irresistible urge to communicate has seized American industry.

We communicate constantly, on an infinite variety of subjects, to all who will listen—and to many who don't. We have at our command an infinite variety of media for the dissemination of our messages, and we miss no opportunity to grab the public by the lapel and pour forth some pronouncement.

This phenomenon is quite new, as measured by my own years of service in industry. Whether or not he actually said it, Mr. Vanderbilt's "The public be damned" has survived as a legend because that phrase did aptly portray the attitude of earlier business leaders. There really was a time when management cared not at all what anyone thought, and that is the origin of many of the problems that have plagued us since.

Now, we are extremely sensitive and self-conscious. We care what *everyone* thinks, and that is as it should be. The sole question is whether the things we say with such proliferation are wise and true; or whether we are so bewitched by the fabulous new means available to us that we communicate just for the sake of communicating and let ourselves descend to mediocrity or even deceit in our utterances.

When S.F.B. Morse, seated in the Capitol at Washington on May 28, 1844, tapped out the first telegraph message to his partner, Alfred Vail, in Baltimore and, quoting from the Old Testament, said in awe, "What hath God wrought?", he spoke in advance for all subsequent inventors. He offered this new miracle of technology as a device for the transmission of thought; at no time did he claim that it was a substitute for thought. Electronics notwithstanding, in the realm of ideas and of conduct we are right where men were in Plato's day. No marvel of science can change the fact that what a man says should be wise and true.

Craving for status that has not been earned plays a regrettable part in the current urge to communicate.

Reflect upon the various segments of society before whom modern management assiduously presents its views.

First comes the customer. At the top of our voices, we cry our wares. Our power of amplification is incredibly increased, but the function is the same as that of the first Arab who raised his voice in the earliest bazaar. We should ask ourselves searchingly whether our morality has increased over his in the same ratio as has our technology.

Next comes the worker.

We tell him earnestly and repetitively that his interest parallels ours and that what we do is well calculated to raise his standard of living—but we need to know whether, within his own frame of reference, he can accept our statements as reflecting full integrity of purpose.

Then there are the junior officers and the white-collar staff to whom we explain in fulsome language our company policies and objectives in the hope that their efforts will become more meaningful. Against these lofty sentiments, we need to measure our daily conduct as observed by these employees at close range.

After these come the stockholder, whom we exhort to enter more fully into the responsibility of ownership in return for the benefits which he receives. Are we sure, however, that we always carefully distinguish between his interest and our own interest?

There is also government, at every level—local, state, and national—to whom we freely offer advice, but more particularly, criticism. To point out the faults of office holders is our very special prerogative, but not always do we pause to ask ourselves whether in managing we consistently place the public good above the expediency of corporate aims.

The ill-defined "image"

Finally comes the general public, among whom we single out for individual attention particular groups such as the clergy, the educators, the housewives, and the ubiquitous man on the street. On the screen of their consciousness we endeavor to throw the corporate image of our company, sometimes before we have brought it into sharp focus for ourselves.

To discharge fully the responsibility which is placed upon management by this compelling new urge to communicate and to measure up to the challenge presented by the multiplicity of the amazing new media requires a clarity of mind and a singleness of purpose which not all business men possess. Any company with money can command the full galaxy of communication media, but no amount of money can buy the wisdom and the integrity demanded for their use.

Take the customer. Advertising is the very life blood of the free enterprise system. To stimulate desire is to increase total effort and thus bring to pass the expansion of our economy. But to promise one product through advertising and deliver another of inferior quality or with an undisclosed price component is sheer chicanery.

Or, take the worker. Here, in the most realistic sense, actions speak louder than words. No amount of glittering posters on the plant bulletin boards can establish a sound relationship between the employer and the employee if safety conditions are bad, if segregation is practiced, if pay scales are below standard, or if the town is a bad place in which to bring up children.

If an executive is tongue-tied in public, it is because he is tongue-tied in private; he has nothing significant to say.

Effective communication with officers and staff inevitably suffers when management fails to sense that in a free society a man good enough to make a strong contribution is good enough to have his own scale of values, and that the goals which he has established for the total achievement of his own life are not necessarily parallel with those which management has proclaimed for the company. Only when an intelligent effort is made to recognize and appreciate his objectives and to integrate them with those of the company, so that a high measure of self-realization is achieved through effort for the company, does communication with him become a significant exercise.

As for the stockholders, our conduct sometimes belies our professed intentions and dilutes the effectiveness of our efforts to communicate. We entice them to the annual meeting with every blandishment at our command—entertainment, food, free samples of product, plant visitations—in short, everything except clowns and can-can dancers. But when it comes to the exercise of the prerogatives of ownership, we deny them the privilege. We ask them to submit their proxies in advance, appointing us as their agents, and then, when they are sitting in their chairs, eagerly awaiting their sole chance for the year of really behaving as owners, we ask them to let their proxies stand so that we may sign the ballots for them. We do not vouchsafe them the opportunity of making even one little cross on a piece of paper once a year in token recognition of the fact that we work for them.

As for the Government, we hardly communicate at all in our own right. We turn all that over to our trade association. That organization maintains a man in Washington or at the state capital who distributes an incredible number of martinis, calls all the Senators and Representatives by their first names, and bores everybody. He can hardly do otherwise, for he has no precise policy to communicate—only the lowest common denominator of opinion.

The earnestly patriotic man in public life—and there are many—really wants to know what the business man thinks on the great issues, but he seldom gets a chance to talk with him face to face. Unhappily, too often the business man doesn't even know his name. Instead, we read the weekly trade association bulletins with great zest and feel we are right on top of the legislative situation.

When it comes to the public, the test of the effectiveness of our urge to communicate lies in the extent to which we share the total experience of our fellow citizens and the way we ourselves behave as members of the public. If we establish leadership on a basis totally dissociated from our business, then people will listen to what we say on management problems. But if we come before them solely as special pleaders for our own self-interest, they will turn deaf ears toward us.

Too much delegation

The principal reason why the executive who is enamored of the paraphernalia of communication doesn't really get inside the people he is trying to reach is that he delegates too much of the job. Busy with plans and projects and cost estimates, he expects his professional staff to perform miracles for him, but he himself gives little time to thinking through the whole meaning of what he is seeking to accomplish.

I have profound respect for those able men who give their lives to the study of human relations. But no one among them can successfully promul-

gate a policy that is neither wise nor true. He has no stock in trade but that which is given to him from above.

Take the ghost-written speech.

I say that if the executive cannot write his own speech, let him make none. If he is tongue-tied in public, it is because he is tongue-tied in private; he simply has nothing of significance to say.

Let him be himself at all times. Let the public know him as he is. Let him stand up and say to an audience precisely what he said to his seatmate on the 8:04 that morning or what he said to his associates at lunch, disagreeable as the results may be in terms of public relations. It is the views of the man himself the public seek to probe, not those of his script technician. In the Greek tragedies, the actors wore masks; but that time has passed. Today, our public is not easily fooled. They say, as did Abraham, "The voice is Jacob's voice, but the hands are the hands of Esau." Only the speaker is deceived. When he quotes Shakespeare or Herodotus he proclaims himself a fraud, and all that he says thereafter is appropriately discounted by those who hear him.

Should the ego of the executive be aroused, which is not altogether difficult to do, the whole effort at communication may fail. The glamor of the new media is highly intoxicating, and only cool heads can be trusted with it. The desire to be seen, the craving for status that has not been earned, the shortcut to recognition — these all play a regrettable part in the current urge to communicate, whereas the qualities which the world desperately needs from management are humility and three-dimensional virtue.

Need: conviction at the top

What society awaits from the business community today is a new intellectual ferment for the generation of wise policy, which will match the perfection of the media and sustain this new frenetic urge to communicate. The high tension lines are waiting and can carry a tremendous voltage, but the central power station is not operating at capacity.

The determining factor in effective communication is conviction. The authoritative voice that carries its message straight into the heart of every listener is that of the man who knows exactly what he believes. His utterance simply will not be denied, because it pours straight out from his spirit. Form does not matter. His sentences may not parse, he may commit crudities of pronunciation, his metaphors may lack polish, but people will listen with rapt attention because he believes so earnestly in his cause. No new marvel of technology will ever be able to bestow that quality synthetically upon a banal message from a man who has nothing to say because he believes in nothing.

No new marvel of technology can ever bestow conviction on a banal message from a man who believes in nothing.

With growing anxiety, society today demands from management the formulation of a new business philosophy, a reevaluation and restatement of the purposes and objectives of the system of private enterprise. Our way of life is on trial in the court of world opinion. Our creed is being distorted by our enemies with deliberate misrepresentation and by ourselves through default. We are not talking back. Sometimes I even ask myself guiltily whether we are capable of talking back.

This rethinking of values must begin in the heart and mind of each individual charged with forming policy. He must pause in the frenzy of his routine until he can determine just what the true image is which he wishes the public to form of his company. He must then inquire searchingly of himself whether that goal carries a full measure of responsibility in a free society and whether the effort required to achieve it by all those employed by the company is consistent with the full realization of their own personal goals as citizen members of a free society.

Communications to the customer, the worker, the official staff, the government, the stockholders, and the public will function smoothly and effectively when total policy is thus conceived in terms of total wisdom and responsibility. —END

HYMN TO HER

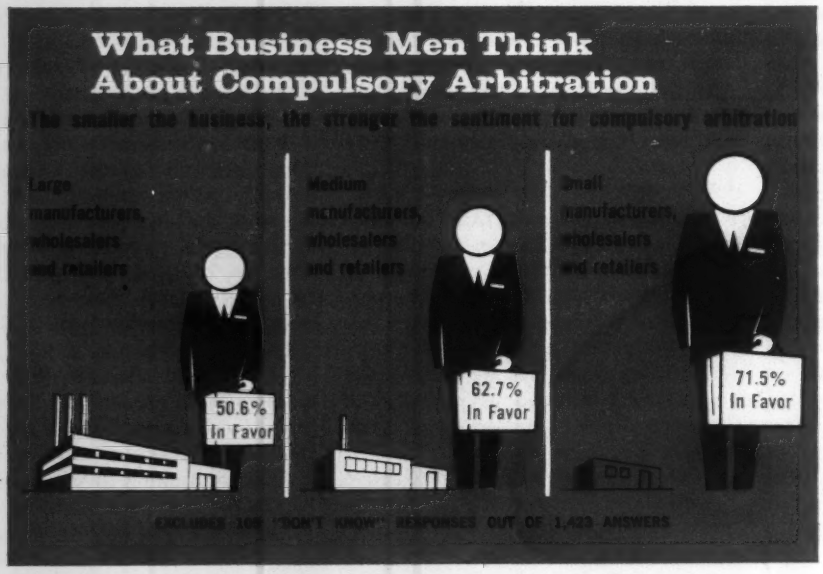
Hail to the secretary who
Knows where things are, knows what to do,
Knows names and faces and, by tone,
Knows rare-heard voices on the phone,
Knows when to talk and when to clam,
Knows when to stay and when to scram.

Come, doff your hat and give a bow
To one who always knows just how
To put in commas you've omitted,
To make you feel that you're sharp-witted,
To cheer, to sympathize, to shine,
To look as fresh at five as nine.

Yes, hail to such a secretary,
Without a blemish or vagary,
Who's never sour and never sick,
Who's never late, who's always quick,
Who's loyal, unobtrusive, willing,
Who stands a pace that most find killing,

A workhorse, yet a sex-appealer.
If you have one, I'd like to steal her.

—Richard Armour


What Business Men Think
About Compulsory Arbitration
The smaller the business, the stronger the sentiment for compulsory arbitration
Large manufacturers, wholesalers and retailers
50.6% In Favor
Medium manufacturers, wholesalers and retailers
62.7% In Favor
Small manufacturers, wholesalers and retailers
71.5% In Favor
EXCLUDES 105 "DON'T KNOW" RESPONSES OUT OF 1,423 ANSWERS

Compulsory Arbitration?

Business Votes "Yes"

To date, most business men have been dead set against meddling by Uncle Sam in labor-management affairs.

But in the wake of the steel strike, a new attitude is shaping up in front offices across the nation.

EVER SINCE labor became strong enough to strike, U.S. business men, legislators, union leaders, and experts have debated the merits of compulsory arbitration in peacetime.

Time and again, they have turned it down.

But today, in the aftermath of the nation's longest steel strike, most American business men have come to look with favor on compulsory arbitration of strikes that cripple the economy.

That, at any rate, is the finding of a big new survey conducted by DUN & BRADSTREET's field force among 1,423 business men running all types and sizes of companies in every corner of America. Reporters went into machine shops, meat packing plants, heavy equipment factories. They talked to business men who make clothing, food products, furniture, lubricants. They visited warehouses and wholesalers, and stopped in department stores, farm implement yards, and shoe shops.

They found that of 1,423, a startling 875, or more than 60 per cent, would favor compulsory arbitration of a situation like the recent steel strike.

Business men sometimes hedged their approval with qualifications. Sometimes they warned of political dangers.

But even the big-company men were split 50-50, and the smaller business man was resoundingly in favor of compulsory arbitration.

Putting the question

Every business man was asked exactly the same question:

"In view of the effect of the recent steel strike on the national economy, would you favor compulsory arbitration of similar strikes in the future?"

Their reactions were sometimes explosive.

A large manufacturer in Columbus, Ohio, banged his hand down on his desk and said, "Compulsory arbitration represents one more step toward socialism!"

A business man at a Buffalo, N.Y., plant spoke thoughtfully. "I dislike the political implications," he said. "But compulsory arbitration appears to be the only means to settle these issues."

In Miami, the sun-tanned chief of a medium-size precision tool company said flatly, "I'm against any kind of compulsion. It's undemocratic." Said a Cincinnati wholesaler, "I'd favor any measure to avoid crippling strikes." A manufacturer of belts and billfolds in Fort Worth, Texas, said, "I want no further Government intervention in any business."

But of the small business men who had an opinion, about 70 per cent

These are the views of some key legislators on compulsory arbitration, as expressed to DUN'S REVIEW:

Sen. Barry Goldwater (R., Ariz.), asked if he would favor compulsory arbitration in situations like the steel strike: "Definitely no. This would be harmful to labor, management, and the public. We need less Government in labor-management negotiations, not more."

Sen. Jacob K. Javits (R., N.Y.): "Compulsory arbitration would result in breaking down the whole concept of collective bargaining in a free society. I do not believe, therefore, that it is a solution for national emergency strikes."

Congressman Ludwig Teller (D., N.Y.), member of the House Education and Labor Committee: "I am opposed to it. It would lead to the kind of controls that would doom free enterprise."

Congressman Robert P. Griffin (R., Mich.), member of the House Education and Labor Committee: "I am extremely reluctant to go along with compulsory arbitration. If it ever became a necessity, I would want to limit it as much as possible."

took another point of view. It was summed up by a small retailer in Milwaukee, Wis.: "Strikes hurt small business too much."

In essence, the business man who gets hurt by a strike through no fault of his own—and who is least likely to come under compulsory arbitration—seems to be its strongest proponent.

Labor - management experts and leading legislators don't necessarily agree that compulsory arbitration would achieve greater labor-management peace. Most don't want compulsory arbitration, but many of them are aware of the growing feeling that something must be done to prevent collective bargaining breakdowns from crippling the economy.

Congress views the problem

Sen. Lister Hill (D., Ala.), chairman of the Senate Labor and Public Welfare Committee, told DUN'S REVIEW he favors an investigation by Congress to determine the wisest course of action in the steel strike or in any similar situation.

Congressman Graham A. Barden (D., N.C.), chairman of the House Education and Labor Committee, said the question of compulsory arbitration was being given "serious consideration." But he said it would be "a wide departure from our way of dealing with labor problems."

Organized labor has long opposed compulsory arbitration. Says David J. McDonald, president of the United Steelworkers, "Compulsory arbitration in the steel or any other great American industry would eventually permeate all phases of American life."

The Administration's position has been stated by Labor Secretary James P. Mitchell, who said that the Government should not have such a club as compulsory arbitration, no matter how cautiously it was used.

Experts like Joseph S. Murphy, vice president of the American Arbitration Association, point out that compulsory arbitration is basically "not compatible with our free system." But, Murphy conceded in an interview with a DUN'S REVIEW editor, "In a grave industrial crisis, where the public might be injured, compulsory arbitration might be invoked as a last, desperate resort, assuming all other methods have been used."

A number of experts and national figures have spoken out in favor of compulsory arbitration in crippling strikes, including the late Harvard economist Sumner H. Slichter and Sen. Spessard Holland (D., Fla.). Sen. George A. Smathers (D., Fla.) has proposed a five-member supreme labor court.

American legislators have considered compulsory arbitration at various times in the past, but they have only approved it in wartime. Compulsory arbitration was proposed and rejected in setting up a Railroad Labor Board in 1920, and it was similarly proposed and rejected in the writing of the Taft-Hartley Law.

Compulsory arbitration has been used abroad by Great Britain, Sweden, Denmark, and particularly Australia, with varying degrees of success. But its effectiveness, even in nations where labor constitutes a major political party, has been a matter for debate. Australia's strike rate, for instance, has been proportionately higher than that of the United States.

Arguments against compulsory arbitration boil down to beliefs that it would reduce the amount of good-faith bargaining by sending many disputes to the final decision-making body, would be ineffective in the long run, would push labor fully into politics, and would lead to Government control of profits and prices.

Here is how business men, grouped by type of business, feel about compulsory arbitration of major strikes.

	Yes	No	Don't Know
Manufacturers	56.8%	37.5%	5.7%
Wholesalers	62.7%	30.4%	6.9%
Retailers	65.2%	25.3%	9.5%

The greater danger

But business men in general appear more worried about the effects of a crippling strike than about the potential dangers of Government-enforced arbitration. And what seems to worry them most is a stoppage in the flow of goods from producers to consumers.

The manufacturers are more leery of Uncle Sam's policing hand than either wholesalers or retailers. Wholesalers, standing midway between the producers and the retailers, like the idea better. And the retail merchants stand 65 per cent in favor.

The figures tell most of the story, but not all. For the business men's opinions cover every shade of argument for and against policed arbitration. Many blame unions for the situation. Some blame Government. A very few even blame business. But most significant, of course, is the fact that many who traditionally have wanted less Government control, not more, now say major strikes can do more harm than limited Government interference.

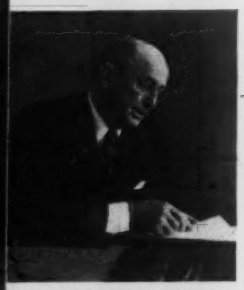
Still, there are many dissidents who believe in paying the full price of a free economy. One of them summed it up in seven words:

"Let capital and labor slug it out."

—JOSEPH R. MARSHALL

A TOP MANAGEMENT INTERVIEW

Secret Weapon of the Soviets



Charles G. Mortimer

"IT'S not a completely accurate analogy," said Charles G. Mortimer, dynamic boss of General Foods Corp., "but the Russians seem to have some of the spirit that existed in this country when I got out of school and went to work.

"There wasn't any question of security then, social or otherwise. There wasn't any question of whether I was going to work hard to get ahead.

"This working spirit is the real Russian challenge."

Mortimer visited Russia last year as a member of the President's Advisory Committee for the American National Exhibition in Moscow and to watch demonstrations of BirdsEye frozen foods at the fair. He came back with some original ideas and impressions, which he detailed to a DUN'S REVIEW editor during an interview at General Foods headquarters in White Plains, N.Y.

"A few days in Russia don't qualify me as an authority," Mortimer stressed. "There's a tremendous language barrier, and I was just a tourist. But I was terribly interested not only in what went on but in trying to put together the significance of things."

A marketing man views Moscow

Mortimer is a trained observer of groups and people. While in his early twenties, his energy and abilities earned him the top selling job in a baking powder company. He went on to advertising, joined General Foods as a merchandising manager, and moved up through marketing and merchandising to the top spot.

Even when he's sitting still, Mortimer gives an impression of energy. Despite the necessary desk work, he has the ruddy complexion of an outdoor man, gained in traveling among General Foods' 54 plants, fishing "whenever there's a chance," riding Morgan horses, and watching over his prize Holstein-Friesian dairy herd at Montague, N.J.

Moscow's impact on Mortimer was immediate and profound. "The second day we were in Russia," he said, "I dictated this note into a little portable machine I took with me: 'It seems to me that I have discovered the secret weapon of the Soviets. It is no secret at all. Quite the contrary: it's the universal willingness and desire to work primarily for the sake of achievement—everyone from waiters in hotels to the people who sweep the streets, the guards, and the police take pride in working and in doing it well.'

"After the visit, and today, I'm thoroughly convinced that the greatest asset Russia has is the attitude of the people toward work. Monetary gains are secondary, completely secondary, to recognition and satisfaction of a job well done.

"But you know what burns me up?" Mortimer leaned forward, gripping his lapels. "It's the way we Americans indulge in wishful thinking. Too many of us seem to think Soviet achievements are a mirage. The only thing that shook us was the Sputniks, and it is easy to forget something that flashes across the sky and doesn't affect your life. But they've got other things a lot more important than Sputniks.

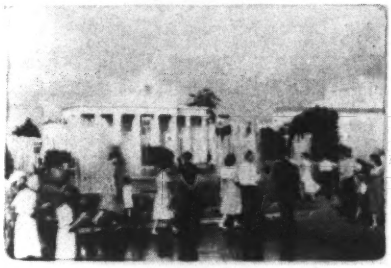
"First, there's their attitude toward work. Then, they've achieved a fantastic unified understanding of why they must be dedicated to increasing, as individuals and as groups, the gross national product. And then, they've scored a decided victory in making the kids want education. I think that victory is a real threat to us. From the day little Ivan can speak, his father—who may be a street car conductor or a carpenter—tells him he doesn't have to live this way. He doesn't have to worry about being accepted at Yale. If he can get the grades, he goes to the University of Moscow to study whatever he's got the mental ability to undertake.

Slides from Mortimer's Camera

Mortimer and Soviet guide Tamara

Waiting to enter tomb of Lenin and Stalin

Eskimo Pies for sale at Moscow University



Their Achievement Fair—"It is beautifully done"

Going into our National Exhibition

They're building miles of apartments

"They reward the educated. We were driving through Moscow one day, and I spotted a lovely apartment building with fine shops on its ground floor, surrounded by well-kept gardens. I asked the guide-interpreter about it. She said, 'That's the best apartment house in Moscow. Only professors live there.' "

"What can we do about education?" his visitor asked.

Mortimer raised a finger, "Mind you, I'm no expert," he said, "but I think the most important thing to do is to make teaching a prouder profession. Give teachers stature and standing.

"The question of education is vital, but it's really part of the larger question of pride in work, a realization of national goals and the need for a national attitude.

"Ted Repplier, president of The Advertising Council, who went with us to Moscow, said the Russian people's attitude toward work shows what propaganda can do. That may very well have been the original cause. Anyway, the results are phenomenal.

"The real genius of Russia is the way they have got the group to work above its head. It is the group that must attain goals, and the strong help the weak. But built into this thing is an individual feeling that a man can outstrip the pack, as well as a feeling that the economy must move up.

"To put it another way, they are all working for the same national goals, and these goals are paramount. They are happy with what they have for the simple reason that it's superior to what they used to have. More important, they are dedicated to working hard for the still better things they believe will be theirs tomorrow."

"Do you think there is any preoccupation with personal security?" he was asked.

A brief smile crossed Mortimer's face. "Nowhere did I encounter the attitude that one is 'entitled' to anything. Most Russian people are willing, apparently, to do without or do with less for the present while their leaders utilize their labors, talents, and resources to communize the world. In short, the Russian people believe in their way of life, and they work at believing—full-time, and with an evangelistic zeal that is impressive when observed at close range. This is the red-hot phase of the cold war."

"What do we do about it?"

"Make the people care"

Mortimer rubbed his chin and sat back. "In the first place," he said, "we've got to make people care. As a people with rather easy-going lives, our problems are not very vital or critical. We're worried about more money, more output. But now we have to care, and when as a nation we do care, there is nothing we can't accomplish. We have proved that.

"Now, I don't know the answer. But I'm convinced the challenge isn't going to materialize in the shape of a Pearl Harbor bombing, nothing dramatic or emotional. And I also believe there's no single answer, like having everyone pledge to work harder. Maybe the answer is a lot of things." He frowned in concentration as he began listing items:

"Maybe, a repositioning of education.

"A greater interchange, so people can see the Russians aren't living in caves and aren't about to revolt.

"Control of inflation and a true understanding of what it can mean.

"Teaching economics more widely to the younger generation.

"Greater moderation in political hassles, particularly moderation of the fiery epithets that are hurled just because the other fellow is a member of the other party.

"But maybe the most important thing would be to have a Presidential campaign in 1960 based on forthright presentation of the issues and to elect a President who isn't isolationist or small-minded. We've got to have a President who appreciates that our survival may depend on what we do and how hard we work at it in these next few years."

—J.R.M.

Mortimer on Soviet Marketing

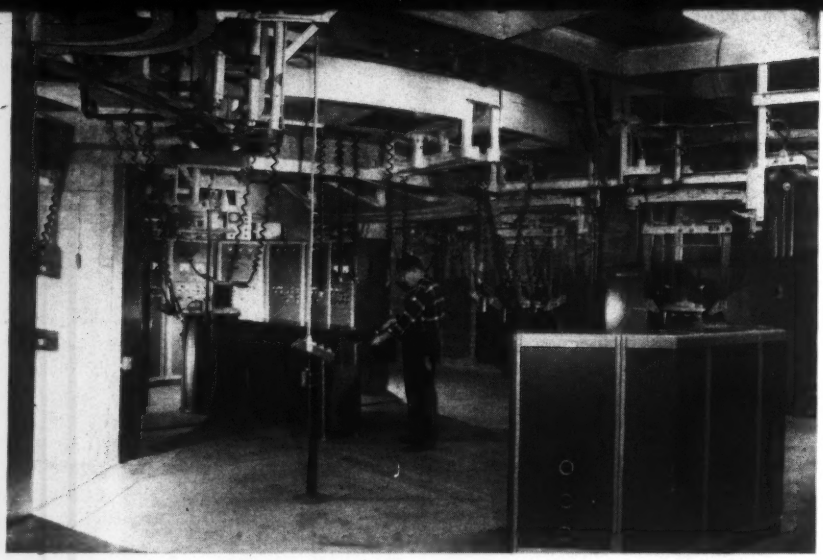
"Our economy is one in which marketing has become a primary function," Mortimer said in analyzing Soviet marketing potentials. "We have passed the era where production was the problem."

But the Russians are still striving to produce. As Mortimer puts it: "Here's the bind they're in. First, they simply haven't gotten into real mass production of consumer items. The goods aren't there.

"Then, the people don't have the buying power that is the essential part of demand, and, of course, they don't even know about a lot of consumer goods that we in America take for granted.

"If and when the Russians achieve real mass production of consumer goods, and when the buying power is there, then they'll need advertising and marketing.

"When they run into this problem, it could be the beginning, at least, of a transition to an economic system akin to ours."



MECHANIZED TESTING *and data generation: This carousel test line automatically tests Westinghouse Electric distribution transformers after final assembly. The test line performs a series of nine standard commercial tests on each transformer, evaluates and records the results of these tests, and then accepts or rejects the transformer. The operator needs only to attach test leads to each transformer as it enters the carousel line. Tests are then programed automatically by punched cards, one to a transformer. When a transformer completes the last test, the results are automatically punched into the same card that programed the tests.*

Progress and Payoff in Industrial Automation

JAMES R. BRIGHT

IN 1956, thirteen of the most highly automatic plants in the United States were cited in a research study made by the Harvard Business School as marvels of industrial mechanization and efficiency. Today, not one of these plants is regarded as remarkable. In five short years, every one of these facilities has been surpassed in degree of automation and amount of mechanization by one or more new installations.

Technological progress both at home and abroad is accelerating at a rate that no executive in any industry can ignore. As a vice president of manufacturing for a major American company recently reported: "In the past four months, I have visited 55 European plants, all built in the past four years. It is appalling to see how far behind we are."

Mechanization is being extended into new places in and out of the factory. The dire predictions of exorbitant capital cost, of a scarcity of skilled workers, and of unmanageable maintenance problems have not materialized. And it is becoming clearer that there is more than one justification for increased mechanization.

Too often in the past, a mechanization program was accepted on one basis alone—labor savings. Today, more thoughtful managements are demonstrating that careful application of automatic machinery offers other gains that may be of much greater benefit. Major investments in automatic equipment are being justified by such benefits as:

- Improved quality
- Reduction of manufacturing lead time by as much as 10 per cent
- Reduction of materials costs brought about by product redesign
- Reduction of scrap losses
- Improved safety
- Reduction in turnover through better working conditions
- Utilization of less-skilled labor
- Reduction in the size of the factory or the production line, hence a savings in building costs
- Reduction in maintenance costs because the total volume of machinery was reduced
- Lower capital cost. Astonishingly, the automatic system sometimes (and only sometimes!) requires less capital investment than a conventional system, because, pound for pound, it is far more productive and less building is needed to house it.

✓ *Automation in the plant is already outstripping the predictions of five years ago . . .*

✓ *. . . and it's paying off in many ways that have nothing to do with labor savings.*

This is still not a complete picture of all the advantages to be gained through highly automatic machinery. More than 24 advantages or motives for automation have been discovered in research studies.

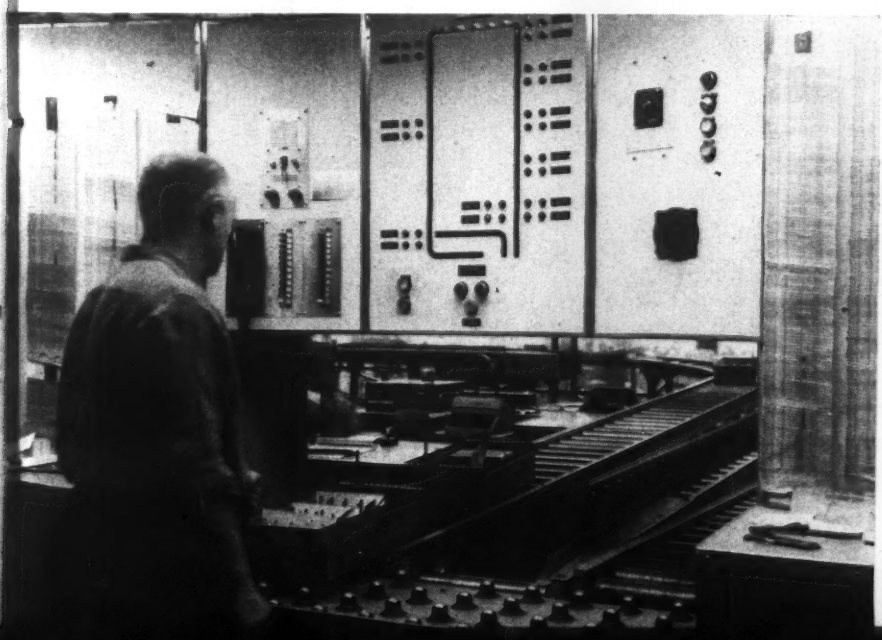
Obviously, these gains are not realized in every installation. Often, only one or two of them are worth considering. And it is equally true that there are certain disadvantages in automation. The following operating characteristics of highly automatic plants should be carefully considered, for in some instances they are serious limitations:

- Reduction in flexibility as to products manufactured: Most executives and engineers are aware that a highly automatic system is likely to limit ability to manufacture a variety of products. But, frequently, managements underestimate the rapidity or the probability of changes in product and market demand. (Witness the "small car" market.) Therefore, careful market forecasting is the essential first step in planning for automation. Then, flexibility to handle all anticipated changes in product design should be the guiding consideration in the engineering design of the system.
- Reduction of input flexibility: Almost everyone admits there are potential limitations in the kind of product that can be manufactured in an automatic system. However, hardly any industrialist seems to realize (until he has learned from sad personal experience) that the input acceptable by an automatic system is fixed almost as inflexibly as the output. Automatic machinery will not take a wide range of raw materials unless it's carefully designed for that purpose. With fabricated parts particularly, the need to adhere to close tolerances or to uniformity may seriously restrict the supply of raw materials. Even such an apparently simple thing as packaging (if it is a unique type) may be unavailable at a reasonable price. Hence, for all practical purposes, the difficulty in securing the correct raw materials can render the automatic production system inoperative. Reduction of flexibility as to source of supply probably is the single greatest unappreciated drawback to automatic manufacturing.
- Reduction of flexibility as to scheduling: Because of long changeover times, each model or product produced on an automatic system must be scheduled for rather long runs. This is often a real disadvantage, since it requires large inventories. It is impossible either to reduce or increase the volume of production economically beyond the fixed and relatively narrow range of the system.
- The need for fast reaction time: The highly automatic factory has the advantage of manufacturing a product very quickly. Unfortunately, each minute of downtime represents that much larger interruption in the flow of production; a production delay means a larger loss. Planned and unplanned downtime, therefore, must be held to an absolute minimum. Critical control and planning of maintenance also is vital, yet few companies are prepared to face up to this need. Equally important are continuous inspection, strategic location of inspection stations, and rapid response to correct malfunctions that can turn the highly automatic line into a monster that manufactures faulty products at a fearful rate.

A closer look at the degree to which automatic operations are being achieved throughout industry in general reveals these major trends in mechanization:

Mechanization of the feeding and removal of work from the machine: Although an obvious advantage of mechanized workfeeding is a reduction in labor needs, a more important gain to many companies lies in increasing equipment utilization. Not many executives or engineers can cite accurate figures on the percentage of utilization of their equipment. In certain metal working plants it has been found that, even under the best mass-production standards, machine utilization is not much better than 60 per cent. The effect of automatic workfeeding in some of these plants has been to increase machine utilization to 80 per cent. Consider the gain. Productive machine capacity is increased 33 per cent, and, in effect, these additional machines are run without labor!

Mechanization of materials handling: Moving materials from common carriers to shipping and receiving docks, to and from storage, to the production line, between machines, to packaging, and so on accounts for a sizable proportion of the labor effort in many plants. Consider how much of your company's payroll goes to shipping and receiving personnel, crane operators, intraplant truck-drivers, fork truck opera-



IN THE JOB SHOP, *automatic movement is a rarity, but Western Electric has accomplished it in the new Merrimac Valley Works in North Andover, Mass. There, systems provide automatic handling of an enormous variety of different parts and production sequences, and link them together with punch-card data processing. In photo at left, automatic dispatching between the production control dispatch center and individual work centers is made possible by a two-level belt conveyer which feeds 55 work centers. Advantages: complete control at a single point, perpetual inventory, reduced moving effort, and a great reduction in paperwork.*

tors, warehouse men, and that portion of production control force concerned with the dispatching and control of material in process. Mechanized handling reduces this labor cost and provides faster movement through the plant.

Mechanization of assembly work: An important development in automobile engine plants, in the radio and television field, and in production ranging from electric lamps to shoes is the mechanization of the task of putting things together. This stage has long since been mechanized in food and bottling industries, drugs and toiletries, and so on, but mechanized assembly is just beginning to appear in the fabricated parts industry. It is probably the most fruitful area for cost savings in many high-volume mass production industries. Its benefits are in labor reductions and improved product uniformity.

Mechanization of inspection: Continuous automatic inspection to extremely high quality standards is a most important trend, particularly in the process industries. The big benefits here are in improvement of quality and reduction of scrap.

Mechanization of distribution activities: Although claims for fully automatic warehousing are exaggerated, individual elements of distribution work have been mechanized appreciably in several companies. Specifically, automatic and semi-automatic sorting and dispatching, automatic handling to storage, automatic assembly and disassembly of unit loads, automatic loading and unloading of carriers, and the application of computers to inventory control are rapidly progressing. Benefits are reduction of labor, increased accuracy, and faster distribution service. (See DUN'S REVIEW, June 1959, page 122.)

JAMES R. BRIGHT, one of the nation's foremost authorities on industrial automation, is an associate professor of business administration at Harvard University Graduate School of Business Administration and a leading consultant. He is the author of *Automation and Management,* published in 1958 by the school's Division of Research.

Mechanization of testing: Testing today accounts for 30 to 40 per cent or more of the labor bill in many electronic and electrical manufacturing concerns. Testing also has grown in importance with the development of the computer and complex machinery systems requiring thousands of properly functioning electrical, mechanical, hydraulic, and pneumatic components. Mechanization of testing and the development of automatic testing procedures is a fruitful field. In addition to labor savings, the gains lie in improved reliability and unfailing uniformity in the testing process. Often, there is a significant reduction in the skill required of testing personnel.

Mechanization of packaging: Some of the companies with the finest manufacturing operations have poorly organized packaging procedures. The next great wave of methods improvement may be directed at this packaging activity. Automatic application of the packaging material, automatic fastening, automatic marking, segregating, and dispatching to shipping are practical and important innovations just getting under way. The benefits are reduction of labor, uniformity of packaging with corresponding reduction of damage, and faster service to customers.

For example, using an Acme Steel Company semi-automatic strapping machine, the Trane Company of La Crosse, Wis., has reduced the time required to apply steel strapping to fiber shipping containers and wooden crates by 50 per cent. The machine tightens the strap to uniform, predetermined tension, cuts the strap, and permanently welds the ends for a perfect joint. All operations are electrically controlled. The result is securely reinforced packages in half the time with minimum operator fatigue. The same type of machine is used by the Reading (Pa.) Tube Corp. to bundle packages of copper tubing. It allows one man to bundle nine times as many packages in an eight-hour shift.

Data processing: So much has been written about this dramatic and important development that it hardly needs to be discussed further. We might emphasize, however, that mechanization of the preparation, assembly, and interpretation of information is important to the factory as well as the office. Progress in production control mechanization through specialized data processing equipment is so rapid that no alert company can neglect to follow these developments.

The integration of data processing and the production system: The really striking thing about a few of the most advanced plants is the way a sales order or processing instruction, generated by data processing equipment, is used to trigger automatically the

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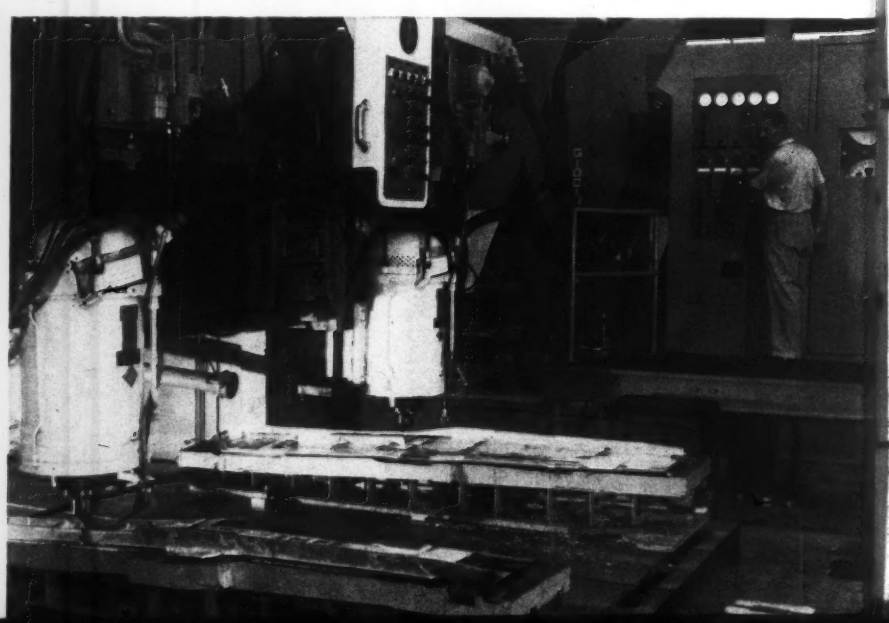
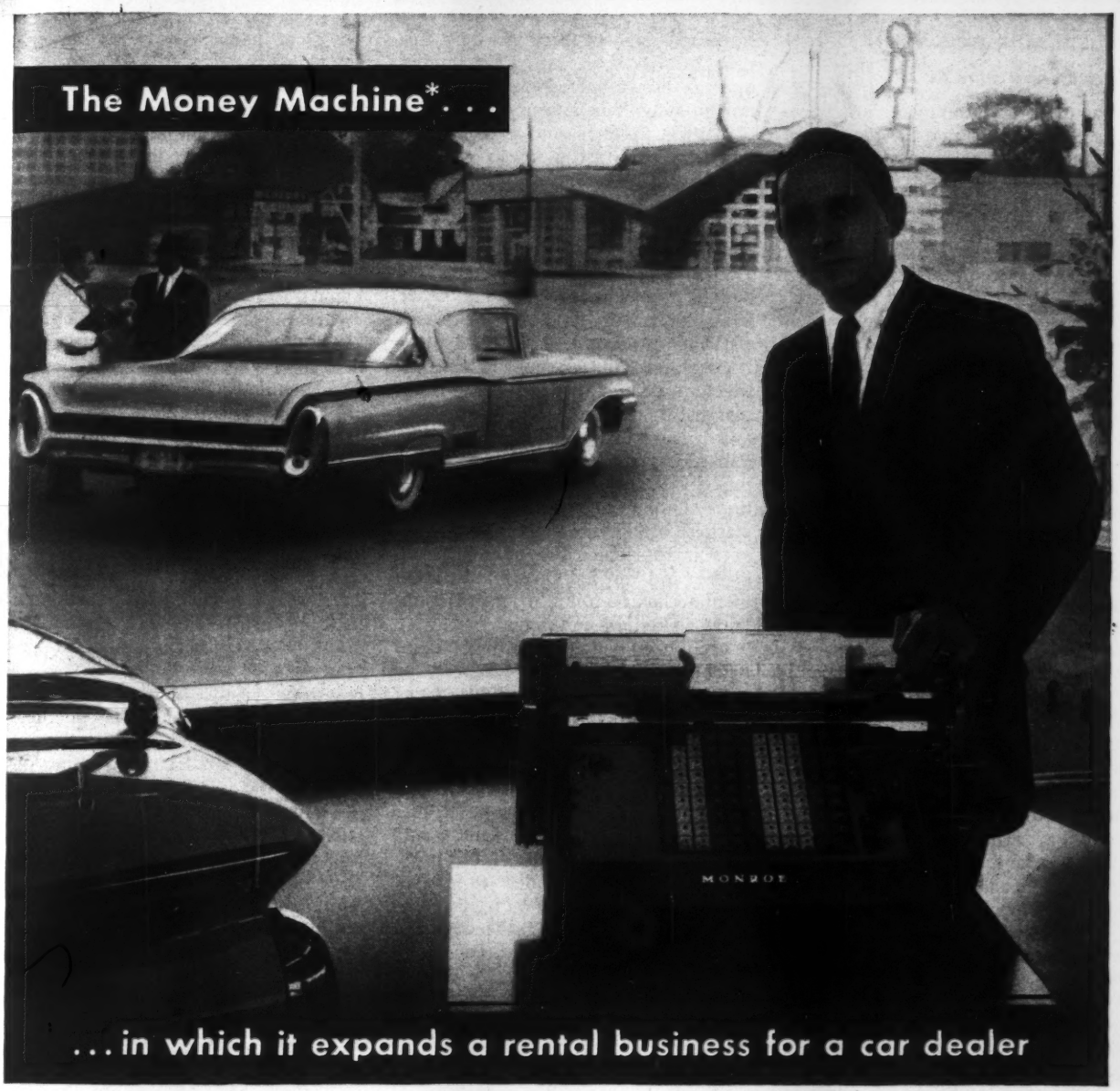


TAPE-CONTROLLED PRODUCTION: *Under the eye (but not the hand) of a workman, this automatically operated profiler, on a battery of tape-controlled tools on the production line of Republic Aviation Corp., makes a series of vertical cuts on an aluminum wing spar cap destined for a supersonic fighter-bomber. Metal punch tapes (out of sight at right) containing all the data found on blueprints, direct the movements of the tool.*



"Our Monroe Accounting Machine saved us $6,724 during its first year. We used that money to enlarge our new leasing subsidiary, Carnegie Auto Rental Company," says Stanley Meisel, President of Meiselgate, car sales and service agency of Cleveland, Ohio. "And our Monroe saved us even more when it took over the extra bookkeeping of the new rental company without extra clerical help."

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manufacturing equipment into prescribed action. Similarly, the action of production equipment is being used to generate records, cards, even tapes, which become the basis for data processing action.

For example, in one warehouse, the program of shipments is fed into the specialized computer. The computer automatically determines and actuates conveyerized removal of the items from stock. These are dispatched to the packaging center, and physical withdrawal of the items from storage is signalled to the computer, so that the current inventory status is faithfully and instantly reflected.

The chief benefits of this development are in the elimination of paperwork and clerical overhead, in faster customer service, and in fresher data for management decisions. Result: reduced inventory requirements.

Mechanization of maintenance: It is often assumed that the more automatic the machinery, the higher the maintenance cost. But studies have shown that this is not necessarily true. In fact, maintenance costs are sometimes reduced because the total amount of machinery shrinks significantly when a completely automatic system is installed in place of many individual machines.

Furthermore, maintenance itself is being reduced by mechanization of maintenance work. A common example is the use of automatic lubrication systems. Another trend is the introduction of signal lights, of interlocking controls, and a host of mechanisms that prevent or eliminate faulty operation or functioning under conditions that might cause damage to the machine. Another development is the introduction of trouble-detecting systems that indicate which part of a system is malfunctioning or has failed. This enables a relatively inexperienced maintenance man to quickly scan the circuitry of the system and spot the trouble.

A good example is the automatic inspection system in use at General Electric Company's Meter Department in Somersworth, N.H. Inspection devices are built into all parts of the automatic assembly equipment which turns out watt-hour meters. The meter parts are automatically inspected for accuracy as they approach each new stage of assembly and are either passed on or rejected immediately. This guarantees a better and more uniform end product and permits G-E customers to sample-test only 3 to 5 per cent of the new meters to insure the accuracy of the whole order.

So, on one hand, we are creating maintenance work by increasingly complex machinery. On the other hand, machinery is being made increasingly foolproof.

Mechanization of communications: Mechanized communications, particularly two-way radio and industrial television and pneumatic tube systems, have produced phenomenal savings by speeding production operations. Other benefits lie in reducing clerical cost and the cost of moving papers; in shortening the manufacturing cycle; and in increasing utilization of materials handling, transportation, and production equipment.

At the Marshalltown, Iowa, plant of Lennox Industries, for example, the installation of a Motorola two-way radio system has reduced the size of the company's lift-truck fleet and improved its efficiency. Before the system was installed, the five lift trucks couldn't handle the load adequately. Adding to the fleet would only have increased the traffic problem, so Lennox decided to experiment with a central radio dispatch system for controlling the vehicles. The result was that three radio-equipped trucks could do the work of five. Now there is 40 per cent less truck traffic in the aisles, and the trucks are productive almost 100 per cent of the time.

Feedback control: Control mechanisms that sense environmental requirements and adjust accordingly to achieve the desired result are considered by many to be the utmost expression of today's technological progress. Feedback control is held to be responsible for new levels of production accomplishment. Although this development may be considerably exaggerated in industry as a whole, there is no doubt that in many parts of the continuous process industries, feedback control has yielded superior products. It has also resulted in the manufacture of products that otherwise were not obtainable, in reduction of waste, and reduction in labor cost. The automatic control of a great many processes seems imminent.

Program control: Magnetic tape or punch-card programing and computer control of equipment often are confused with feedback control. However, programing systems are not variable controls. Rather, they are a system for mechanized prescription of an intricate sequence of production events. (See DUN'S REVIEW, August 1958, page 46.)

Mechanization of set-up operations: A weakness of automatic machinery has been that great skill and intelligence usually are required of the set-up personnel. At first glance, it appears that set-up activities cannot be mechanized. However, notable progress is being made in certain instances.

The most striking example is the automatic programing of computer-controlled machine tools. Recently, the Air Force and the Massachusetts Institute of Technology announced the APT system (automatically programed tool system), considered a milestone in the automatic production of complex parts. The operator can communicate the description of parts and required cut sequences directly to the high-speed digital computer in a relatively simple, English-based language. People with no knowledge of computers can direct the complex calculations which result in a program for machine control coded on to the tape that guides the cutter motions.

This development is typical of the way the continual advance of mechanization is eliminating human bottlenecks.

But in addition, it points up the basic fact that, although mechanization has been applied to many primary functions in the factory and the office through automatic manufacturing and processing, we are only in the first feeble stages of applying mechanization to secondary and tertiary tasks.

Wise managements will follow this accelerating mechanization progress closely. Its effects on business are becoming more severe, subtle, and profound. There will be more machinery and less human effort in the "mix" of production facilities of the future. Management, therefore, will have to deal with more of a fixed element and will have less flexibility than in the past. END

It's time to take a new look at microfilm

Originally, microfilm was used extensively for the preservation and compact storage of "dead" records and information. No one can deny it is beautifully designed for this purpose.

But recent developments in techniques and equipment have made microfilm the most efficient—and active—business tool to have been invented in years. Yet many people avoid microfilm because they think it is complicated. Nothing is farther from the fact.

Microfilm is nothing more than taking a picture. It's as simple as a box camera. All you do is reduce bulky files to space-saving film—in compact rolls or on tabulating cards. You may install equipment to do this operation—or you can call in a company that will do your filming and help you organize your active files.

The only equipment you need to make any microfilm file active—usable daily in your business—is a THERMO-FAX "Filmac 100" Reader-Printer or "Filmac 200" Reader-Printer. Developed by 3M research, "Filmac" Reader-Printers combine the advantages of a reader and a printer in a single low cost unit. Read the film on the big screen. When you want a print, just touch the button and you'll have an enlarged copy in seconds. "Filmac" Reader-Printers bring microfilm within the reach of any business—any organization—now.

There are many THERMO-FAX "Filmac" Reader-Printers actively at work today in a variety of businesses—saving time, money, and improving efficiency. We invite you to take a new look at microfilm. Mail the coupon now for a free copy of "Let's Take a Positive Look at Microfilm" . . . a 12-page booklet about microfilm at work, written by a recognized expert.

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These two photos show a portion of each side of a 50-ton coal car rebuilt in 1951 by the Norfolk & Western Railway. One side is copper steel, the other is USS COR-TEN High-Strength Low-Alloy Steel.

Which hopper is older?

Actually, they're both the same age because they're both part of the same car, despite the weathered appearance of the hopper end and car side shown in the bottom photo. It is copper steel and shows at least 50% more corrosion than the USS COR-TEN hopper end and side sheet shown in the top photo.

In 1951 the Norfolk & Western Railway rebuilt the bodies of 20 old hopper cars; and, to make sure that the material was subjected to exactly the same service, they built one side of each car of copper steel and the other side of COR-TEN steel. This test was undertaken to prove to themselves how they could make their hopper cars last longer. After seven years, the cars were carefully checked for both corrosion losses and paint adherence. In actual service and in every type of atmosphere, the test results proved then, and certainly more so today, that COR-TEN steel retained paint longer and lost considerably less from corrosion than copper steel.

Such is the case in many kinds of equipment, whether they be railroad cars, earthmovers, or a stationary application like electrical transmission towers. In rural, industrial or salty seashore atmosphere, USS COR-TEN steel resists corrosion better (4 to 6 times), and retains paint longer than ordinary carbon or copper steels. Expensive painting bills are drastically reduced.

You save other ways, too: USS COR-TEN steel is stronger, so whatever you build can be thinner and lighter, carry or hold more, cost less, day-to-day, in the long run. For more information, contact our nearest sales office or write United States Steel, 525 William Penn Place, Pittsburgh 30, Pennsylvania.

USS and COR-TEN are registered trademarks

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United States Steel Corporation—Pittsburgh
American Steel & Wire—Cleveland
Columbia-Geneva Steel—San Francisco
Tennessee Coal & Iron—Fairfield, Alabama
United States Steel Supply—Steel Service Centers
United States Steel Export Company

United States Steel

WT 43400 P

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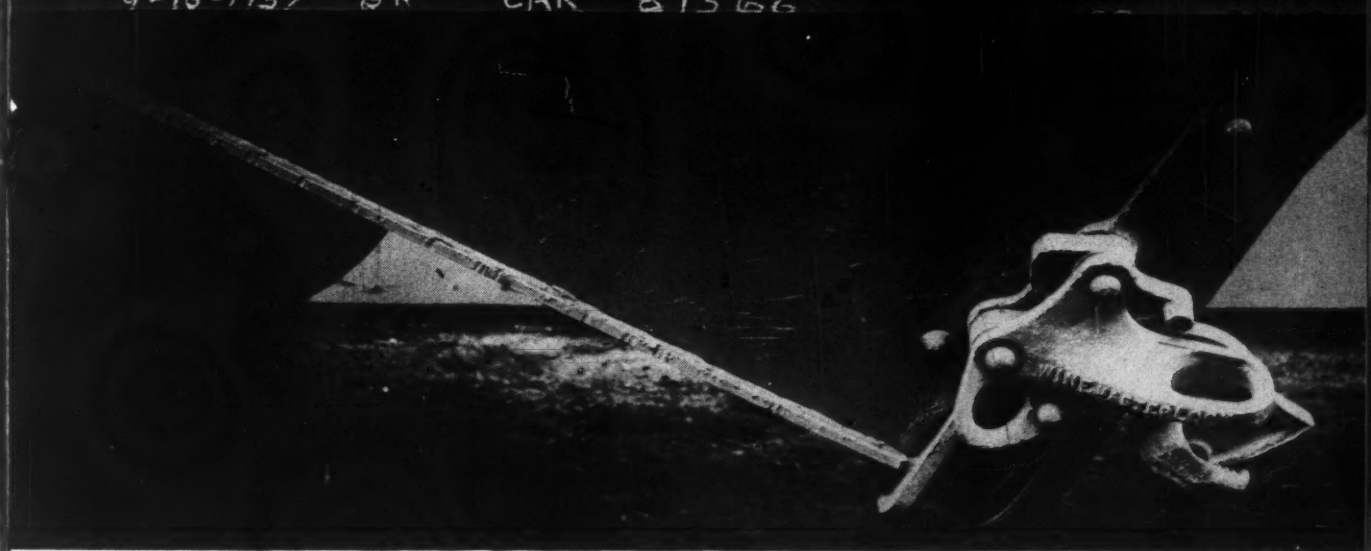

WT 43400

CAR 87566 9/16/1957

"Heller Guidance—More Valuable Even than Heller Funds"

says E. M. Stevens, President, Great Western Loan & Trust Co., San Antonio, Texas

Seated in his "office"—a battered Ford—was a San Antonio businessman with Harry E. Abrahams, Vice President of Walter E. Heller & Company. The year was gloomy 1934. The Texan, E. M. Stevens, a former tire distributor, had just rejected the recommendation of one of his creditors that he make a depression-caused settlement for $80,000 he owed. Stevens insisted that he would pay his debts in full. Abrahams was profoundly interested in the man, his outstanding character, and his prospects for success under the Heller plan of operation. At Abrahams' suggestion, Stevens borrowed $30,000 from Heller and then and there the Great Western Loan & Trust Company began.

"With Heller's help that $80,000 was paid long ago," says Mr. Stevens. "From a standing start we have grown from $100 thousand annual volume to 10 million with Heller funds and Heller financial guidance. As a regular Heller client we have advantages. We have ample funds always available from one source. We have freedom to devote our full energies creatively to our business. Best of all we have the benefit of the great experience of this national financial company, particularly its Rediscount Division which specializes in serving firms of our type."

The enthusiasm of Mr. Stevens for Heller service is shared by many other businessmen in many lines of endeavor who have also been helped along the road to success by the use of Heller funds and Heller guidance. You may obtain similar benefits.

To learn more, write for our informative free booklet, "Operating Dollars."

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Living With the Law

PAUL A. KING

- *Alert to ominous rumblings from the FTC, smart managements are carefully rechecking their sales promotion practices.*
- *Going in for politics? There are legal angles too. Depends on how far your company decides it wants to go.*
- *How will your company's future patents hold up? A look at your R&D policies today can save you a peck of trouble later on.*

FTC Tightens the Screws

Hard pressed for increased sales in highly competitive times, sales promotion executives tended to ignore in the past few years any suggestion that certain of their practices might be vulnerable to attack by the Federal Trade Commission. Or, if they did have a twinge of concern, it was quickly dismissed in favor of a calculated risk. But now that the risk appears to be greater, it must be calculated with a good deal more caution, and less derring-do.

A look at last year's FTC operations suggests stepped-up activity where the manufacturer and retailer are hardest hit—at the point of sale. For many surprised manufacturers, this has meant cutting out special prices, deals, discounts, and volume and advertising allowances for favored customers. For retailers, it has meant eliminating traditional advertising practices that have now been branded by the FTC as deceptive or bait advertising.

The companies that collided with the FTC weren't all small-timers. Among the big companies cited by the FTC for violations in last year's closing months were Grand Union, General Mills, Sperry-Rand, and Westinghouse Electric.

What makes the FTC so aggressive?

Explains Jerrold G. Van Cise, chairman of the American Bar Association's Section of Antitrust Law: "There's an increasing recognition by the Commission of its twofold function: to enforce vigorously by formal proceedings the laws entrusted to them and to welcome sympathetically efforts by industry to comply with these laws." That's the philosophy. But there's more to it.

To meet this double objective, FTC procedures were streamlined. Cases now take less handling time. Thus, more cases can be handled and more company activities looked into. More companies are being looked into because there are more complaints—not only from a consuming public newly educated to FTC operations but from companies themselves.

Increased activity can also be attributed to hard-driving Commission Chairman Earl W. Kintner. Kintner made his position clear when he told a group of advertising men that he believes "in a firm, strong, fair enforcement of . . . antitrust and trade regulations laws now on the books."

The laws entrusted to Kintner's care carry rough penalties. Example: for violating final order to cease and desist giving a volume discount a company can be fined up to $5,000 a day for each violation.

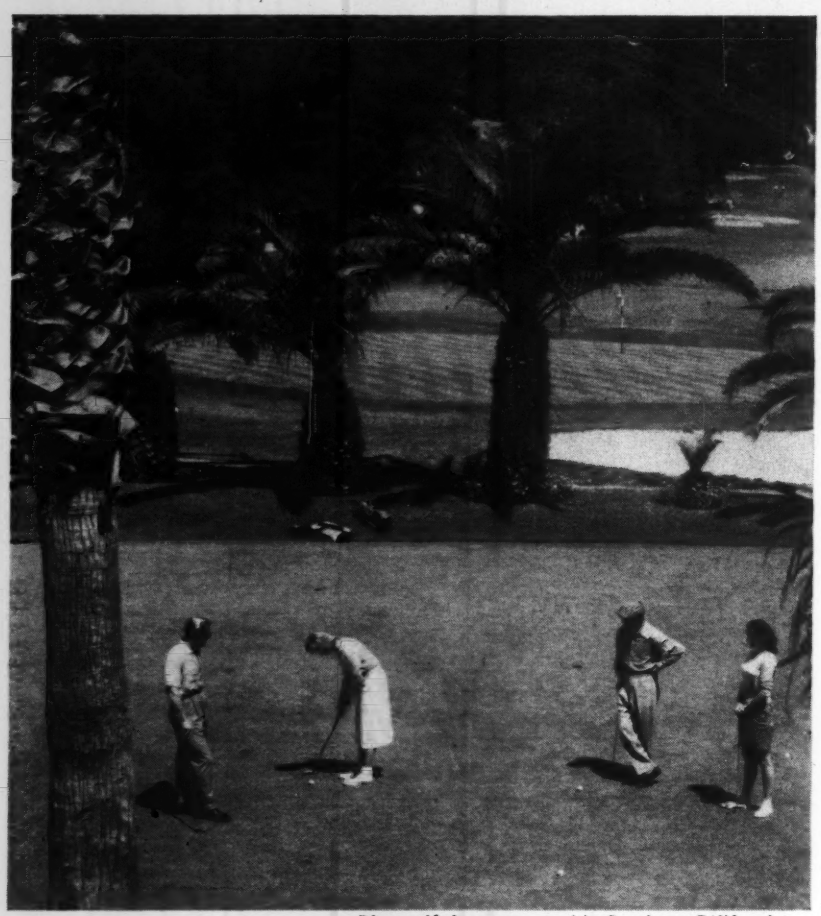
In some instances, the offending company can be sued by an injured party for triple damages, the cost of his suit, and his attorneys' fees—to the extent reasonable.

Where does this leave top management? The technical rules laid down by the law and the commission offer some guides. For example, the law says you can cut prices for special customers to meet specific competition. Advertising and promotion allowances can be given on a proportionately equal basis to all. Volume discounts can be given as cost justified. You can bone up on the FTC guides and conferences rules on deceptive and bait advertising. Unfortunately, this self-study will get you only so far. The big trouble is that this is highly technical material. It's easy to go overboard in one direction or the other—that is, over-compliance or under-compliance. It's really up to competent legal counsel to chart a road that complies with the law but does not, at the same time, strangle your operations. Management's threefold job is to:

- alert sales promotion personnel to the FTC's new aggressiveness;
- have its attorneys review company sales and advertising practices for FTC violations;
- decide how much risk the company

With this issue, DUN'S REVIEW introduces "Living with the Law," a new department which will appear in alternate issues. Its author, **Paul A. King,** combines the talents and experience of a top-flight corporation lawyer and a business editor familiar with the broad range of management problems.

A member of the New York State Bar Association and attorney for a leading eastern manufacturer, he has also served as an executive editor of Prentice-Hall, Inc., publishers.



Play golf the year round in Southern California

Meet the Nation's Number 2 Market

Los Angeles Metropolitan Area retail sales have sky-rocketed to about $9 *billion* annually. This tops Chicago by $300 million - (according to the 1958 Sales Management Estimate).

From a business standpoint, this is an area you ought to know. The best way is from first hand inspection, so you can really gauge your future business opportunities here.

And *now* is the best time to visit here. For this is Southern California's Spectacular '60 . . . a series of exciting events added on top of our sunny days and famed sight-seeing attractions.

Plan now. Come soon. Reap the benefits of *both* Southern Californias: Delightful vacation area . . . vital, fast-growing business center.

Free Full-color Sight-seeing Map of Los Angeles County, all Southern California. Locates 645 sights, plus 100 movie stars' homes. Mail coupon today.

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This advertisement sponsored by the Los Angeles County Board of Supervisors for the citizens of Glendale, Hollywood, Inglewood, Long Beach, Los Angeles, Pasadena, Pomona, Santa Monica, Torrance and 181 other communities.

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will underwrite—to what extent it's prepared to go along with your lawyers' advice.

Politics May Not Pay

Take a poll of top company brass these days, and the odds are that most will agree they ought to encourage their employees to take an active part in politics.

However, opinions will differ as to the extent of such encouragement. Some companies would merely publisize the records of candidates to employees; others would go so far as to recommend particular candidates. Still others would be content with campaigns designed to get out the employee vote.

But no matter how far you may be willing to go, this is certain: Before a company embarks on a political action program, there are laws to consider. How many depends upon the extent of the proposed activity. There are laws requiring registration of lobbyists, laws limiting the sums corporations can contribute to election campaigns, and laws requiring employer-sponsored leaflets supporting candidates to bear certain statements. There are a lot more laws on the subject of politics. The cautious company will touch base with company counsel before going ahead with a political-action program.

But strangely, the National Industrial Conference Board revealed that only slightly more than a quarter of the executives cooperating in their survey of 198 manufacturers took the matter up with company legal counsel and satisfied themselves that their plans violated no law. Some companies simply concluded that the key to keeping legally clean was to remain non-partisan. Some, being really conservative, feared legal repercussions and decided to stay away from it altogether.

Where Strong Patents Start

Not all of a company's research will end up in patents, but it's reassuring to feel that when you do get a patent it isn't vulnerable for easy assault by a competitor because of something the researcher did or failed to do early in the game. Seemingly strong patents have failed to hold up when, for example, the inventor failed to keep a convincing record of the date the invention was conceived, neglected to

make it clear that he was only a co-inventor, or published a scientific paper describing the invention long before the filing of the patent application. Too much money is invested in research to risk this result.

Strong patents begin in the research laboratory. And for 15 cents a copy, you can put a valuable and an easy-to-follow booklet (25 pages) in the hands of your research personnel that will tell them what they should know for better patent protection. Called *Patents and Inventions* and available from the U.S. Government Printing Office, the booklet also will help top executives understand what patent counsel says about your company's patents—and those of your competitors.

Arbitration Clauses Valid

"One of the dark chapters in legal history concerns the validity, interpretation, and enforceability of arbitration agreements," said Judge Harold R. Medina, of a United States Court of Appeals, giving new hope for increased use of commercial arbitration clauses. (See "Can You Use Commercial Arbitration?", DUN'S REVIEW, October 1959.)

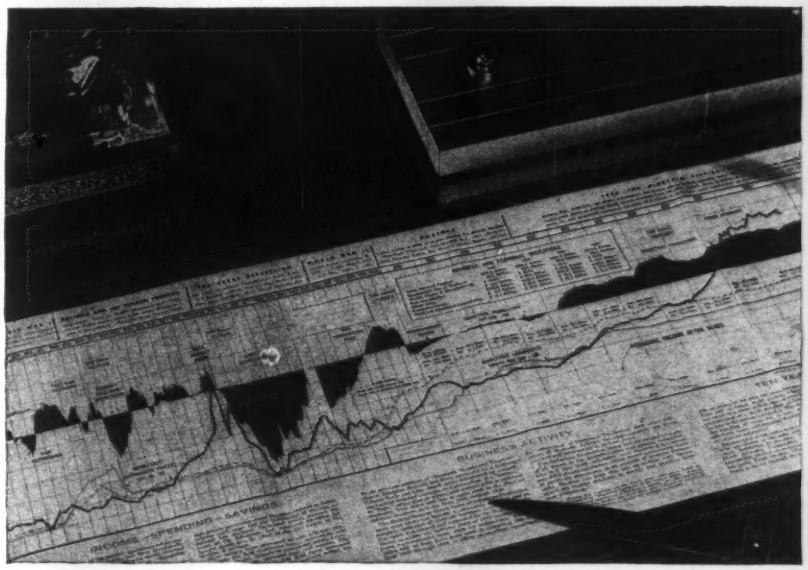
For settling commercial disputes, arbitration is fast, handy, and less costly than going to court. But what good is an arbitration clause in your contract if—as too often has been the case—state courts take the position that they won't enforce it?

Medina's court ruled that arbitration clauses in commercial contracts involving interstate commerce and maritime affairs are valid and can be enforced by Federal courts. "Arbitration agreements of this character, previously held by state law to be invalid, revocable, and unenforceable are now made 'valid, irrevocable, and enforceable,' " it concluded. From now on, there will be more reliance on arbitration clauses.

One Secret You Can Keep

With the help of the National Labor Relations Board, unions have forced companies to turn over such data as wages paid employees, job classifications, individual merit ratings, incentive bonuses, and methods used in calculating wage rates. Over the years, the area of company data you must furnish unions has been growing apace. That, the NLRB has argued, is

Ready now...



YOUR 1960
Business Trends Chart

U. S. economic history at a glance

Let this picture of the past help guide your future. It shows you more than a century and a half of business ups and downs, with informative notes on our national economy. Colorful, ideal for your desktop or wall.

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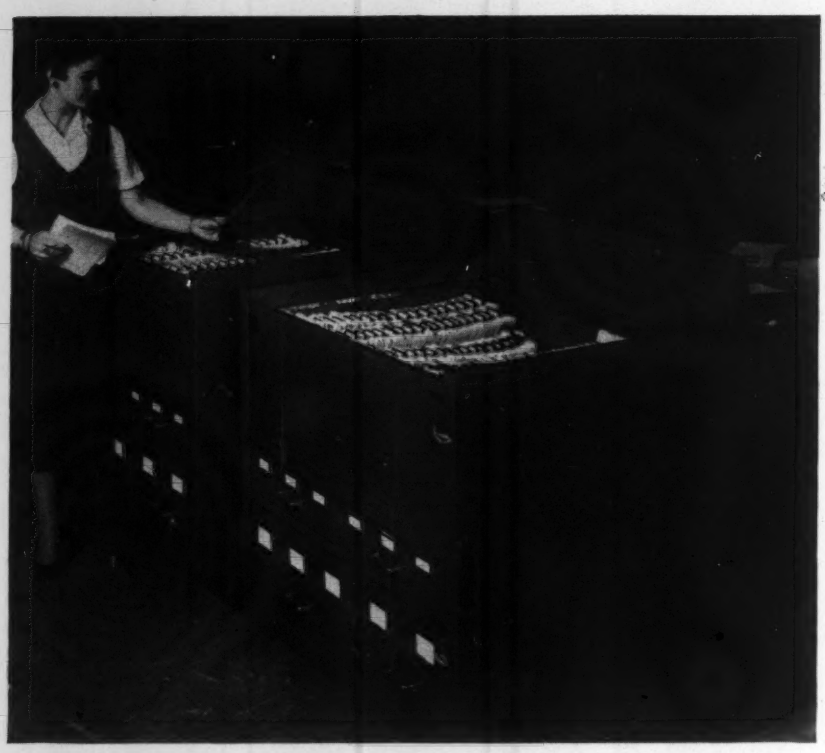


Why Custom-Built Business Equipment is Economical

NO TWO BUSINESSES ARE ALIKE. Your business has operating methods, a personality and individuality all its own. So doesn't it make good sense to invest in business equipment designed to fit your particular operation . . . rather than having to adjust your operation to fit equipment that happens to be available?

LeFebure custom-builds sorting, cash handling, mail handling, filing, record keeping and accounting equipment for industry, commerce and institutions. LeFebure custom-building assures you greater efficiency . . . full capacity with easy accessibility . . . utilization of all space . . . solid strength and durability . . . insulated housing for protection of all contents . . . and complete operator comfort.

First of all, a LeFebure representative will study your operation, taking into careful consideration your space availabilities, work-flow, personnel and future expansion. At no cost to you, LeFebure will make a layout showing you just what equipment is recommended, where it will be installed and what it will accomplish. When you have approved this idea, LeFebure fabricates the equipment and supervises the installation, making sure the equipment serves the purpose for which it was designed.

A careful analysis of standard units frequently shows the real savings that can be effected with custom designed equipment. Perhaps there's a possibility in your office. Let's find out.

LeFebure *Business Systems and Equipment*

LeFebure Corporation, Cedar Rapids, Iowa

An Affiliate of Craig Systems, Inc., Lawrence, Mass.

because unions need the information to negotiate intelligently and police the union contract.

But not long ago Trial Examiner Thomas F. Maher drew a hard line when it came to insurance data and warned unions to stay on the other side. Unions are not entitled to know how much a company is paying for its employee insurance, he said, if the plan is a noncontributory one. The union had claimed it needed costs to determine whether better coverage could be obtained from some other insurance company at the same price. Ruled Maher: such information, like a company's operating costs, is none of the union's business. But note: if your plan is contributory, then the costs assessed the employees may be of legitimate concern to the union. A savings in employee costs is equivalent to a wage increase.

Now It's Safe to Wait

Executives have never felt secure about unequivocally contributing a large sum to a newly-created pension or profit sharing plan in the hope that the Internal Revenue Service will accept the plan for favorable tax status. But making the contribution contingent on a favorable ruling, they felt, might jeopardize receipt of a favorable ruling.

This particular worry has now been cleared up. The Commission has made it clear that contributions to such a plan can be made contingent upon receiving a favorable ruling.

Word of Mouth Is Binding

Special agreements with key employees frequently provide that, in addition to salary, they are to receive a percentage of company profits and capital stock. Such agreements certainly should have the approval of the board of directors, and possibly the stockholders, too. And they should be put in writing to avoid future misunderstanding. But even when an agreement of this type isn't in writing, a court has ruled that the employee could enforce it. And this despite the statute of frauds, which provides that contracts to be performed over a certain period —a year in most instances—must be in writing. The employee had performed his part of the agreement, the court ruled. To let the company get away with such a defense would be unconscionable. END

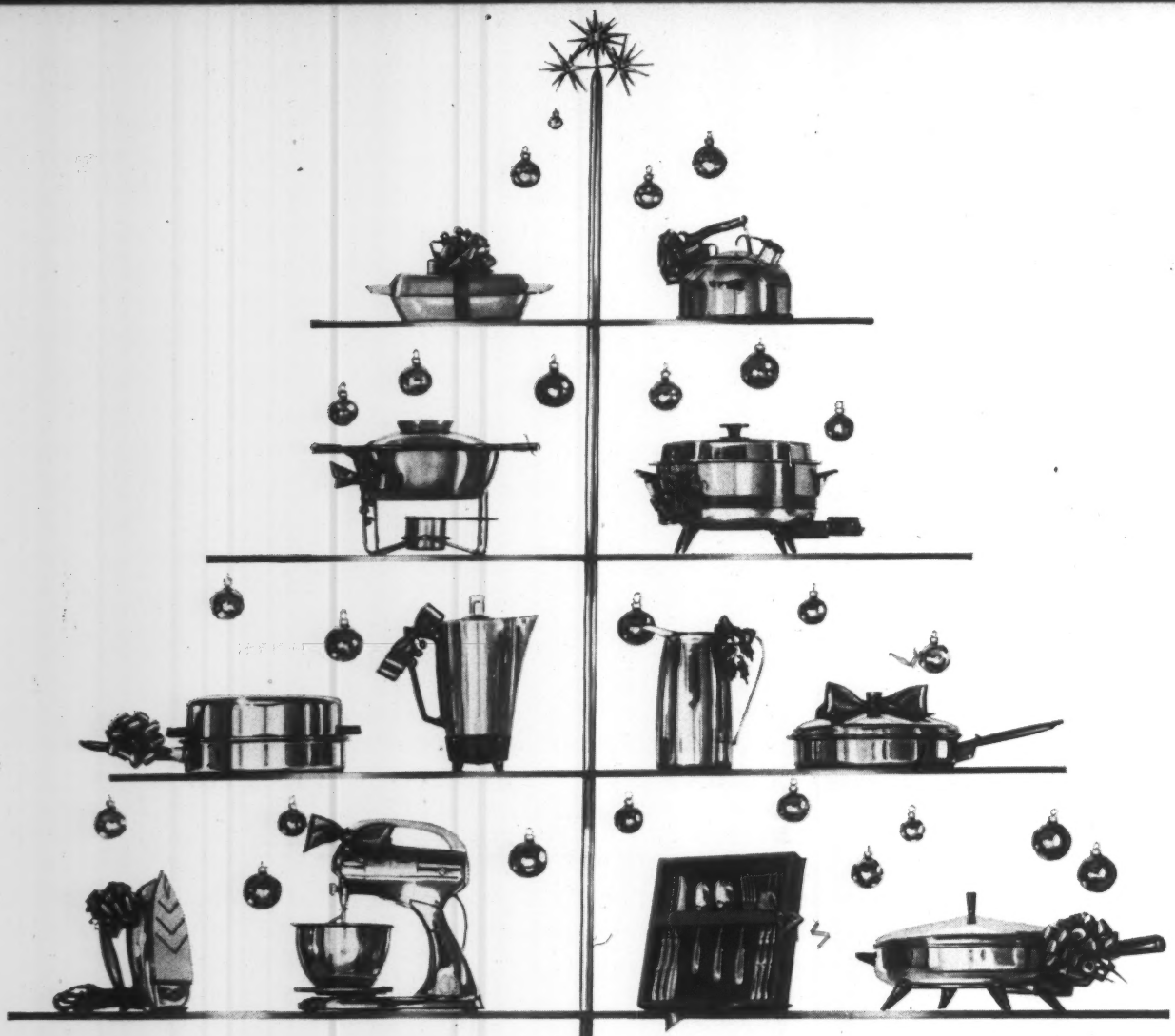
Profile of a President

Twenty years ago, DUN'S REVIEW *published a promotional brochure, "The Care and Feeding of Presidents," and we have been sympathetic observers of their behavior ever since. What are the qualities and characteristics of a successful top executive of a business corporation? To what extent is his thinking logical, his behavior predictable, and his achievement measurable? From the Presidents' Panel, with its flow of top management opinion on a wide range of topics, has emerged an interesting composite image of the man who heads a company in the "big business" bracket. Here is a profile of this imaginary, but in a sense representative, industrial leader.*

The successful chief executive is identified by these qualities, talents, and eccentricities:

1. He leads by example more than directive, and those who follow feel the pull of his personality rather than the push of his will power.
2. He surrounds himself with experts but often confounds them by his short cuts to essentials, his ability to clarify and simplify.
3. He has the curved vision of the prophet who sees the goal ahead without disturbing too many who stand in the light.
4. He hates technical jargon and under the pretense of ignorance gets needed information reduced to language any executive understands.
5. He listens with respect to at least one management maverick who disturbs the economic pattern makers with off-beat ideas and auguries.
6. He is logical up to the point of decision, when he may upset the obvious with inspired judgment—the hidden gift of leadership.
7. He is a planner who describes perimeters of time and space, leaving the inner dimensions to the man at the drafting board.
8. He has an imaginative approach toward opportunities for growth, preferring a slightly larger measure of risk than caution.
9. He has an eye for detail but no love of it, leaving that chore for the near-sighted and the pencil-chewers.
10. He picks "yes" men who see potentials beyond the question asked, and "no" men who are specialists in methods, techniques, and cost accounting.
11. He has more respect for the man who makes a wrong decision in an emergency than for the man who wrings his hands and takes refuge in the rule book.
12. He wants the facts in black and white, but is well aware that every observer colors his report according to circumstances and interests.
13. He likes black ink on the annual statement, but knows that an occasional red-ink season is the test of management stamina.
14. He takes plenty of advice from the treasurer on investing profits already assured, but as little as possible on the risks of capital expansion for future reward.
15. He may be a specialist by training, but he is a generalist in spirit and a humanist in his attitude toward life's problems and compensations.
16. He listens attentively to the playback of grapevine news, but knows that most of it comes from palace-guard chatter.
17. He tests management potential at all levels with authority as well as responsibility and is always prepared for surprises—some of them favorable.
18. He believes in law and order, but refuses to be thwarted by tradition—especially when competition gets ahead without it.
19. He admires democracy in principle but often ignores it in practice, realizing he is a majority of one when the chips are down.
20. Without being a paternalist, he considers his employees, customers, and stockholders as personal charges—and in that order.
21. He is loyal to his community and has a deep sense of social obligation, but refuses to be the whipping boy for the mistakes of civic management.
22. He has strength of character that eschews pomp, bluster, and strut, but he is resolute under any test of ethics or honor.

—A. M. S.



How to make Christmas gleam of Nickel sales brighter...with the Stainless Steel

Give your product the appeal of Nickel Stainless Steel and you give it a headstart in today's competitive markets.

This bright, modern metal fabricates easily into the most graceful shapes your designers can create. It shows up with compelling appeal on the store shelf. And its beauty lasts, reminding the buyer what a good product *you* make every year of its long life.

The job of building consumer preference for products with the gleam of Nickel Stainless Steel begins with research and engineering. But it doesn't stop there. There's "follow-through" in the form of technical service to aid fabricators in manufacturing problems. Oftentimes cooperation extends further into the area of advertising and merchandising to make sure that Nickel Stainless Steel products are made available to the ultimate user.

Take a long hard look at your products. If they can be made of Nickel Stainless Steel—they will benefit from the sales advantages this bright modern metal gives them.

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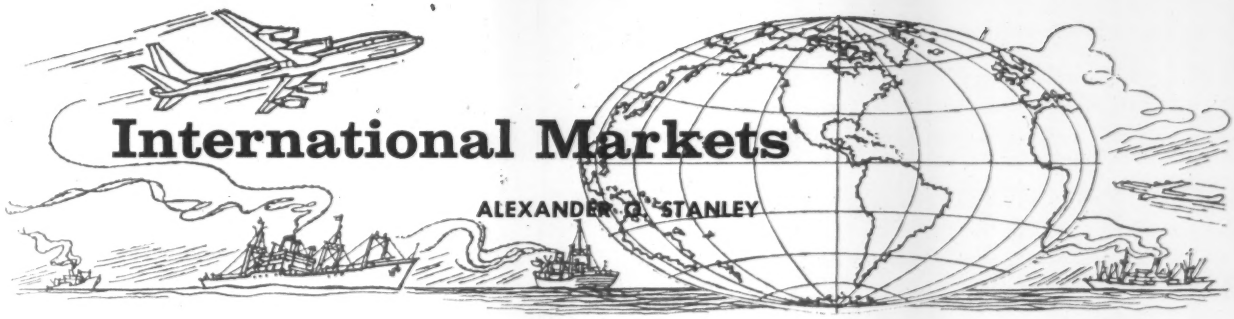
The International Nickel Company, Inc.
67 Wall Street, New York 5, N. Y.

INCO **Inco Nickel** *helps make stainless steel perform better longer*



International Markets

ALEXANDER Q. STANLEY

- *Prospects for recovery in international trade, aid, and balance of payments cheer U.S. traders.*
- *GATT member nations resolve to ease restrictions and promote freer trade in world channels.*
- *Seven Latin American countries drop trade barriers to form new common market.*

Trade Picture Brightens

U.S. prospects in the international trade field appear to be growing brighter. Government officials expect that recovery patterns will show up in trade, aid, and the balance of payments during 1960.

U.S. exports are expected to rise to $17 billion, up roughly $1 billion from preliminary estimates of 1959 levels. The most immediate improvements are expected to show up in such divergent categories as jet airliners, cotton (long depressed), and farm products. However, the demand for U.S. farm commodities may be temporary, since the upswing is linked to drought conditions in Europe.

A long-range, across-the-board improvement in other U.S. export categories is expected as the result of decisions by more and more countries to remove quota and other restrictions from made-in-USA products.

Selling in overseas markets

Individual U.S. companies are putting more muscle into their export drives. Salesmen are being "exported" to overseas markets in increasing numbers. On-the-spot advertising is expanding. More liberal credit facilities are being offered to meet the terms of overseas competitors. And some companies are opening warehouse depots, stocked with spare parts and equipment, to provide better service and faster deliveries.

The spend-it-here policy on aid monies recently adopted by the Development Loan Fund may be adopted by other U.S. agencies involved in the overseas aid program, notably the International Cooperation Administration. This should lead to new multi-million-dollar export opportunities, especially in capital goods and supplies.

Congress will be asked to vote larger rather than leaner aid appropriations, and expectations are that it may go along with the request to some extent. The Departments of State and Defense won a signal victory over opponents in the Budget Bureau and Treasury Department by persuading President Eisenhower to advocate a $4.1 billion overseas aid program to the upcoming session of Congress. At its 1959 session, Congress voted $3.2 billion in overseas military and economic aid, paring down the President's request by $700 million.

The 1960 balance of payments will be in the red by some $2.5 billion, Government experts predict. Although this is still high in comparison to deficits in recent years averaging $1 billion, the 1960 projection shows a solid recovery from 1959 deficit levels presently estimated at $4 billion.

Imports to level off

In contrast to expectations of rising exports, imports are expected to level off, creating a larger *trade* surplus in 1960. This would offset the heavy outflow of dollars spent abroad by the ubiquitous American tourist, invested overseas by American management, and loaned or given away by the U.S. Government in order to reinforce the wobbling economies of "have not" countries.

Some Western European countries, aware that the aid program is putting a deep dent in U.S. gold reserves and that there is growing impatience here with Government lending and spending abroad, have considered ways to lighten the load. At least three countries—the United Kingdom, France, and Germany—have come up with a palliative, if not a panacea—debt prepayment. The advance payment of the $250 million "Suez loan" by the British, the prepayment of an equivalent amount by the French to the International Monetary Fund, and the payment of a $150 million loan ahead of schedule by the Germans, have helped reduce the dollar drain. It is to be hoped others will follow suit.

Plans to ease trade regulations on dollar imports and to provide some portion of development funds in the critical areas are two more important facets of the reciprocal trade-aid program to which Western Europe is now subscribing. All these moves spell improvement in the U.S. bal-

2 sound values

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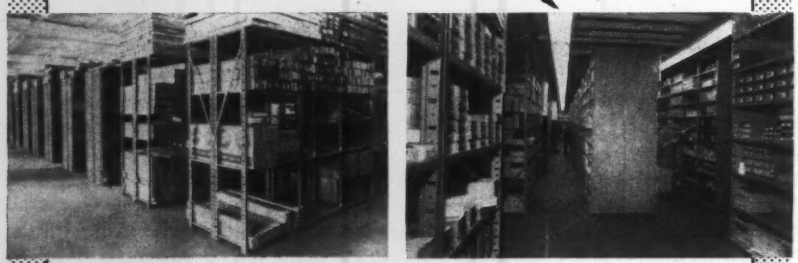

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ance sheet for 1960—*if* industrial prosperity continues abroad and *if* industrial peace is secured at home.

GATT Studies Trade Bars

Reports from the fifteenth session of the General Agreement on Tariffs and Trade recently concluded in Tokyo are encouraging in retrospect and prospect. The session, attended by delegates from 34 of 37 member nations proved to be a vindication of U.S. foreign economic policies pursued since 1945, according to W.T.M. Beale, U.S. Deputy Assistant to the Secretary of State for Economic Affairs and head of the U.S. delegation. Beale said that evidence reported during the meeting showed that U.S. assistance programs had accomplished their purpose, which was to help many of the major trading nations recover their economic strength.

Fernando Garcia Oldini, chairman of the GATT conference, declared this session marked the end of the problems of the postwar era and the beginning of a period of freer international trade.

Study wage disparities

Among the agreements reached by the delegates was a plan to investigate the impact of low-cost imports from low-wage countries on the economies of high-pay countries. Cited as examples were Japan and the United States, who have been trying to resolve the problem of trade reciprocity vs. wage disparities by controlling the outflow of Japan's cheap exports.

The conferees also agreed to study ways to lure the less-developed countries of Asia away from stabilization mechanics and toward investment laws. Retreating from their early stand for price and production controls of raw materials, the Asian bloc agreed in principle to explore means of raising internal consumption and creating a larger volume of trade interchange among themselves to relieve gluts in world markets. The easing of investment laws will be an important part of this approach to self-help. New investment inducements by the "have not" markets will make financial headlines in 1960.

It was also decided to ease the trading position of the United States and other countries in world markets by amplifying the program to remove or reduce artificial trade barriers. Al-

though the delegates concurred in the final report, which showed progress is being made toward currency convertibility and quota reductions, there was also agreement that much still remains to be done to clear the murky atmosphere in world trade channels. One tangible result was an agreement by Japan to lift restrictions from made-in-USA goods in two stages in 1960 and 1961.

And equivalent treatment, or at least some lightening of controls on U.S. products in the near future was promised by eight other countries. The countries are France, Italy, West Germany, Norway, Australia, Belgium, the Netherlands, and the Federation of Rhodesia and Nyasaland. Some products under scrutiny are U.S. cars, alcoholic beverages, fibers, canned fruits and vegetables, fresh apples and pears.

Toward freer trade

Less specific in terms of time but important in their context are these sweeping resolutions:

- that individual governments examine and, as far as possible, overhaul impeding regulations involving tariffs, duties, preferential arrangements, import quotas—in fact, any controls that inhibit free trade with the underdeveloped countries.
- that internal taxes affecting local distribution of foreign-made products be open to discussion at the World Tariff Conference scheduled for Geneva next September.
- that discriminatory restrictions against outside products be avoided by the three common market blocs—the European Economic Community, the European Free Trade Association headed by Great Britain, and the pending Latin American combine.

New Common Market

Another common market goes into effect next month. Under the Montevideo pact, Argentina, Brazil, Bolivia, Chile, Paraguay, Peru, and Uruguay will merge into a free trade zone. The Montevideo pact aspires to this timetable:

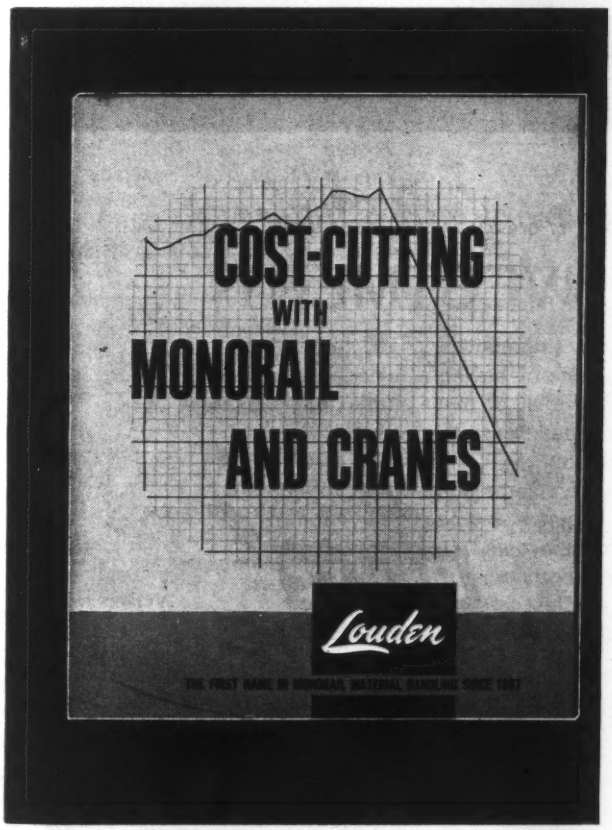
- Eliminate internal trade barriers within the seven-nation bloc over a period of twelve years.
- Reduce duties and import barriers at the rate of 25 per cent every three years, or complete elimination by the twelfth year.

Although it was formally approved by the GATT nations in line with Article Fourteen of the General Agreement, which encourages customs unions and free trade zones, the new market integration was given a cool reception by some delegates who, with good reason, think the initial effect will be to pinch off outside trade with the merged area.

Even more concern was shown about the treaty signed recently by the "big two" Latin American countries, Argentina and Brazil. The treaty broadens the scope of industrial interchange between the two countries, especially in science and technology. Here are the essential pledges and purposes of this new agreement:

- to promote unilaterally the importation of raw materials and industrial goods with the purpose of striking a balance between imports and exports;
- to develop complementary industrial programs;
- to emerge as modern industrial nations.

Under this agreement, it looks like poor pickings ahead for outside traders. END



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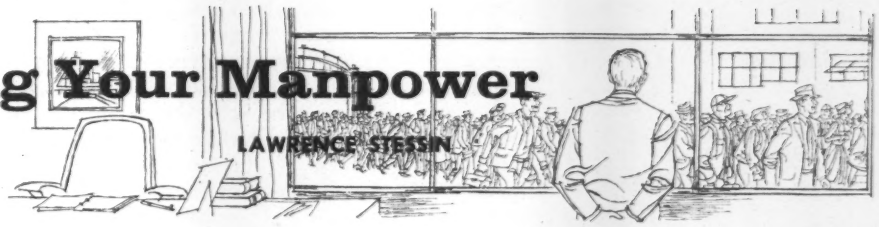
Managing Your Manpower



LAWRENCE STESSIN

✓ *On his way up, today's executive is often shunted around—at considerable cost to his company and his family life.*

✓ *Promotions, salary boosts, and liberal moving allowances help convince the employee that this trip is necessary.*

EVERY week thousands of executives pick up bag, baggage, spouse, and kin and take off for destinations known. They are part of an industrial migration which began right after World War II, and the crest is not yet in sight. No one knows for sure how many employees are junketed from one location to another each year. One clue is the fact that in 1959 industry spent close to $250 million to trundle the belongings of men on the move. This cost does not include such out-of-pocket expenses as providing baby sitters when Mr. and Mrs. Manager go on a house-hunting tour of the new area.

Who are these corporate migrants? Many are employees being transferred to new responsibilities marked "promotion." Others are caught up in the growth binge of a $500 billion economy, as companies seek elbow room for expansion by going from urban to suburban sites. In 1958, some 70,000 businesses moved to new quarters, and economists say that by 1962 three times that many will have shifted men and machines to new administrative and operating bases.

Problems aplenty

When a company pulls up stakes and moves en masse to an industrial park or suburb, it's a one-time operation, and the problems ultimately are resolved.

But frequent switching of an executive or a middle manager—here to head up a department in a new branch plant, there to invade a competitor's sales territory—creates many continuing problems.

There is the employee's social and psychological discomfort that comes from being shuttled from one home to another. This is not an inconsequential factor when one considers that in an occupational lifetime of, say, 25 years, a staff, line, or professional man will be moved to another city 5.6 times. Other surveys show that in fast-expanding companies, transfers of key men can be even more frequent.

Companies are not insensitive to the impact these dislocations have on a man's family and social life. And some have considered alternatives—like recruiting outsiders instead of shifting regulars to other spots. But this substitute has been found wanting. First, the cost differences are prohibitive. Recruiting expenses exceed relocating costs by two to one. Second, it violates an almost sacred management concept — promotion from within.

There are other considerations. The trend to decentralization makes it downright hazardous to entrust the running of a facility to someone who hasn't had solid grounding in headquarters practices and policies. Moreover, the "generalist theory"—that industry should be run by men of broad, not specialized experience—makes it incumbent upon companies to shift

The Company Pays the Freight

A survey of 688 companies shows that in addition to more money and a chance for promotion, most companies offer liberal financial help to executives who accept transfers to another plant city. Here are some of the survey findings:

Transfer means a salary increase or promotion:

Usually	60%
Sometimes	24%
No connection	14%

Company pays transportation costs:

For employees only	92%
For families	87%

Company handles all moving arrangements: 64%

Company gives moving allowances:

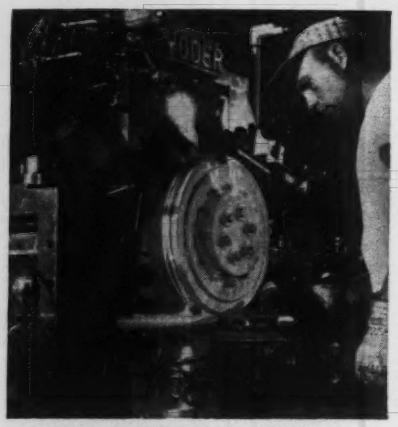
For moving	100%
For packing	92%
For unpacking	83%
For servicing appliances	57%

Company finances house-hunting trips:

Employee time off	75%
All expenses	52%
Wife's expenses	51%
Wife's transportation only	20%
A fixed allowance	7%

Company pays married employee living alone temporarily in a new city:

Living expenses	80%
Per diem allowance	10%
Expenses of weekend visits home	44%



Yoder Tube Mills speed tailpipe production at AP Parts Corporation

The AP Parts Corporation (Toledo, Ohio), world's largest producer of replacement mufflers and tailpipes, uses 2 YODER Tube Mills to produce more than *300* ft. of 1¾", 1⅞" and 2" tubing per minute.

According to Mr. John Grindle, Plant Engineer, the two-man operated YODER Mills are vital to the production of the entire plant. "YODER Tube Mills earn their keep daily. They are easy to set up, maintain and operate ... the welds are clean and uniform. We depend on them for constant quality, high production and minimum downtime".

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If your products require ferrous or non-ferrous pipe or tubing, from ¼" to 26" diameters, there is a YODER Mill designed to produce it economically, accurately and efficiently.

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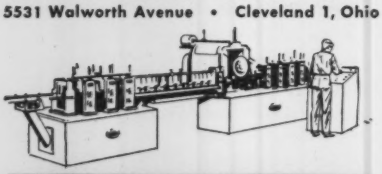

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men around from one job to another.

In larger companies, a man is not tapped for relocation merely by chance or happenstance. Specific and pinpointed policies, plus electronic aids, help management decide who moves and who stays. At the General Electric Company, for example, the personnel inventory file is broken down according to such functions as engineering, production, sales, administration, and so on. On each card, the employee's history, performance ratings, job preference, and suitability for transfer or promotion are recorded.

Spotting the candidates

Whenever an opening occurs in the company anywhere in the United States, central headquarters is notified. The electronic machine goes into action, and the records of prospective candidates emerge. These are then sent to the divisional manager for appraisal, and, finally, the candidates are invited for an interview.

Even when less precise methods are used, the procedure is much the same.

"We're a smaller company, and we don't have an elaborate set-up for picking men who will be moved to other areas. But I have our people slotted pretty well in advance. When something opens up, I don't need much time to decide whom to send," says one executive.

Does a transfer always mean a raise in salary or a promotion? Usually, but not always. A survey of 688 companies made by Greyvan Lines, Inc. (see box), shows that in 60 per cent of the companies a geographical move means more money in the pay envelope or a quick opportunity to advance. In 24 per cent of the companies, such a reward sometimes is offered. Only 14 per cent of the companies offer neither a promise of raise nor a promotion. In such cases, it may be that a position has been cancelled in one area, and the incumbent is offered "something else."

Does the man whose name falls out

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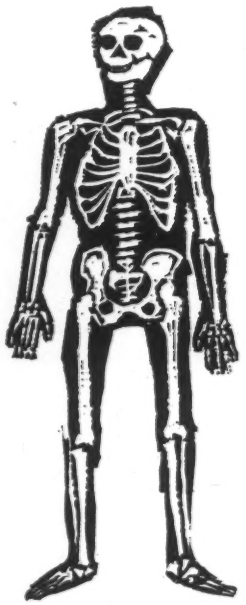


THIS EYE-CATCHING ANSWER *to automation was distributed to employees by the Roosevelt Savings Bank of Brooklyn, N.Y.*

of a computer ever refuse a transfer that promises better things? It happens, but rarely.

"The young man in business today is not a stick-in-the-mud," says a personnel research director. "Many of them have been in the Army, and they are used to travel. We are a mobile nation. Our forefathers were people who picked up and went."

Most executives agree that a man who refuses to move because of the inconvenience limits his future opportunities with the company.

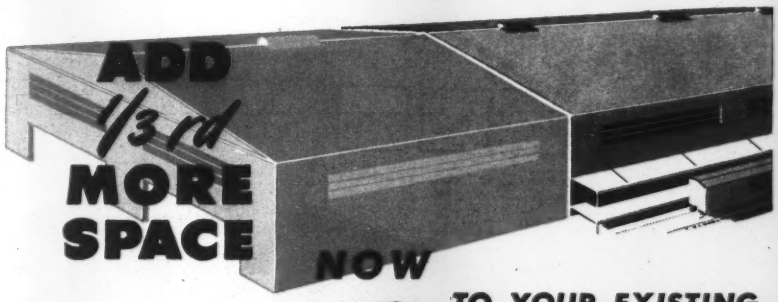
"We had one man," comments a vice president, "who didn't want to transfer because he played first violin in the community symphony. The new location had no similar cultural outlet. He begged off. We didn't fire him, but we had to be frank and tell him that his chances of going further were slim. He answered that that was OK with him; he was perfectly happy to stay where he was."

Fears of the family

The ready acceptance of transfers when they are proffered does not mean that the executive does not have accompanying anxieties about the move. The No. 1 concern is the adjustment of children to new environments. Young children seem to adjust to relocation rather easily, but teenagers who have made attachments to friends and schoolmates don't always cotton to the idea of seeking new roots in a new school. The man's wife also feels uneasy about making new friends, to say nothing of the worry and wear and tear involved in finding and furnishing a new home.

However, experience shows that most fears about change turn out to be illusory. A survey of transferees of thirteen companies shows that better than three-fourths admitted that their fears were groundless. And no company official interviewed could recall anyone ever asking to return to his old stamping grounds because of inability of the family to readjust to a new environment.

Most companies practice a "hands off" policy on the teenager and wife problems of the employee marked for transfer. But if companies avoid the helping hand in emotional and social problems, they go all out on the pocketbook front. Few executives suffer any financial losses because of their transfers. Company policies (see box on page 63) are liberal to the point of largesse. END



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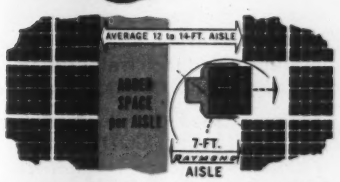

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The salesbook is used to record all sales that are to be charged or delivered, except COD's. Copies for every use are produced in a single writing—receipt, shipping label, packing slip, audit and billing copies, inventory control record and so on. It is a complete paperwork system in itself, and it helps Carson's give their customers the kind of service that has won for the company the name "the friendly store."

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» *Poll of 1,400 business men shows 68 per cent expect gross sales to top 1959 totals.*

» *Gross profit gains over 1959 are anticipated by better than half the companies surveyed.*

What's Ahead for Sales & Profits?

AT THE START of every new year, business men try to determine what's in store for their companies in the next twelve months. The task this year will be more complicated and demanding than usual.

Not only are we at the beginning of one of the most widely anticipated decades in memory, but certain influences peculiar to 1960 itself are at work. Among these are recovery from the longest steel strike in history and the possibility of a resumption of the walkout, as well as labor strife in other industries. In addition, there has been much talk of tight money, of attempts to hold the line on Government spending, and of increasing caution in regard to inventory accumulation.

One way of getting some idea of the outlook for 1960 is to ask business men themselves what they think will happen in their own concerns. A poll of nearly 1,400 executives conducted late in October by DUN & BRADSTREET, INC., reveals that business men are fairly optimistic about their gross sales prospects and a little less hopeful about their gross profits.

It should be remembered, however, that this survey is not a forecast but an indication of the views held by a representative group of executives at the time the poll was taken. It is also worth noting that, as other surveys of this type have shown, business men are generally more optimistic about their own companies than they are about their industries or even the economy as a whole.

Some 68 per cent of all those interviewed expect their gross sales in 1960 to exceed actual 1959 levels, and only 4 per cent anticipate declines. In other words, the "ups" outnumber the "downs" seventeen to one. The remaining 28 per cent expect no change in sales levels this year.

There is hardly any variation in the range of opinion from one classification of business men to another. Only among manufacturers of nondurable goods is there even a slight deviation. Here, 67 per cent are on the "up" side, 2 per cent on the "down" side, and 31 per cent expect no change.

A large majority of all the respondents anticipating sales increases expect gains in dollar volume of 10 per cent or less. Thirty-nine per cent estimate their sales will be between 1 and 5 per cent higher than last year, and 36 per cent foresee gains between 6 and 10 per cent. Increases of more than 25 per cent are expected by only 3 per cent.

As for gross profits prospects, a little more than half—56 per cent—anticipate gains in 1960 over 1959, 38 per cent foresee no change, and 6 per cent expect declines. One reason the profit picture is not quite so bright as sales may be that increases are expected in operating costs, especially materials and labor.

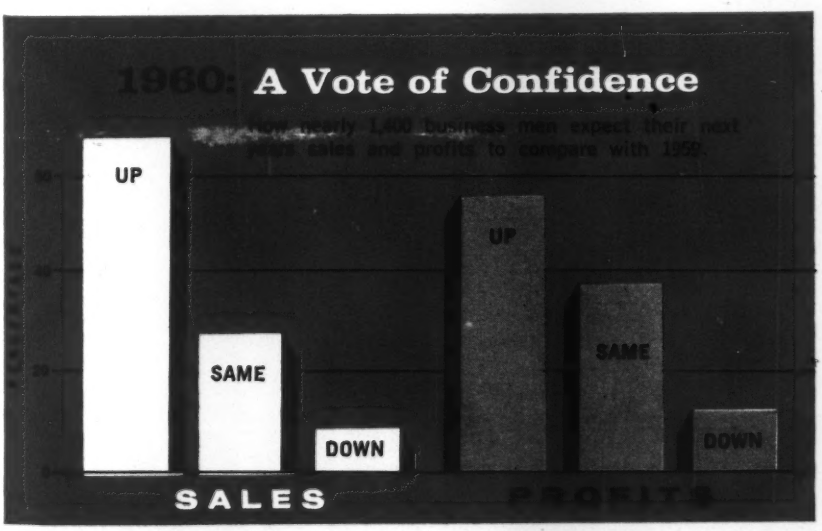
Manufacturers were the most hopeful about profits. Sixty-two per cent of the durable manufacturers and 57 per cent of nondurable makers expect higher profits in 1960 over 1959.

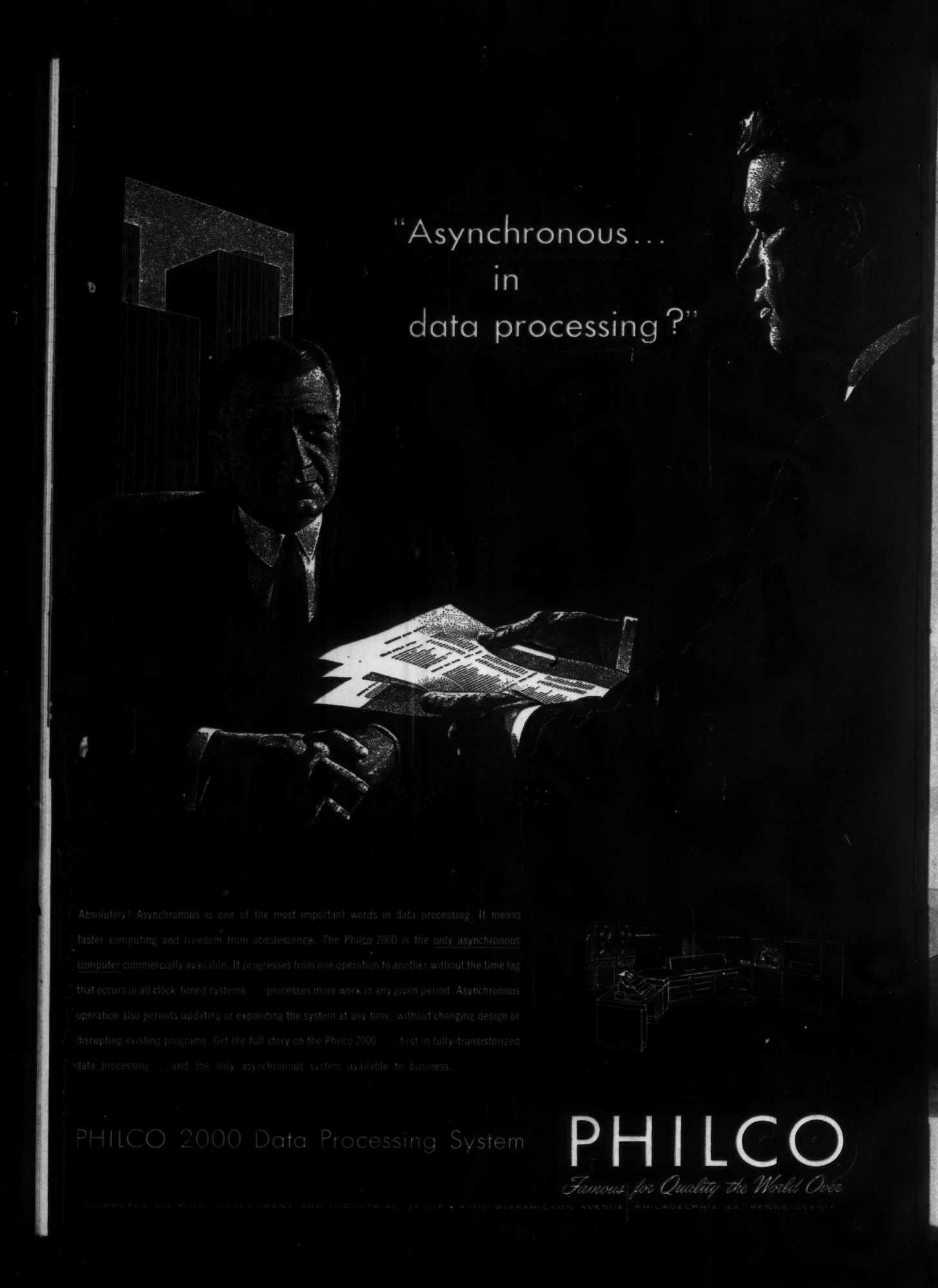
Wholesalers are the least optimistic about their 1960 profits prospects. The "ups" number 52 per cent, the "no changes" 42 per cent, and the "downs" 6 per cent. Retailers are only a little more hopeful—54 per cent foresee profit gains and 4 per cent anticipate declines.

Of all those expecting higher profits in 1960, better than half—57 per cent—foresee gains somewhere between 1 and 5 per cent. Another 23 per cent expect increases from 6 to 10 per cent. An optimistic 4 per cent look for gains of 25 per cent.

Although 69 per cent of all the executives who anticipate lower profits this year foresee decreases of 10 per cent or less, another 23 per cent expect declines of more than 25 per cent. The remaining 8 per cent believe their profit levels will be down between 11 and 25 per cent this year.

—JOHN W. RIDAY





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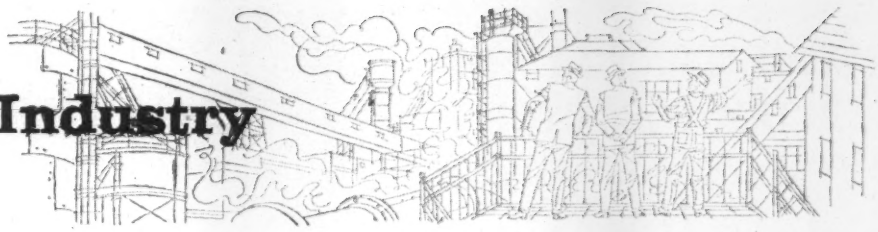
Inside Industry



- *Bigger industrial jobs for gas turbines*
- *Dust dampener aids pollution control*
- *Power-plant dilemma: efficiency vs. flexibility*

New Power Source

An armada of giant, continent-vaulting jet liners overhead is obscuring the steady progress of grounded versions of the gas turbine in less glamorous situations.

These whirling dervishes are already in use driving air compressors in steel mills, pumping natural gas for thousands of miles, generating electricity, and powering the fast boats that take crews out to off-shore drilling rigs.

The General Electric Company has already sold more than 200 huge industrial gas turbines in the 16,000-hp-and-up class. The largest produces a shaft horsepower of nearly 40,000. Westinghouse Electric Corp. has installed more than 100 of its giant gas turbines. Recently, the Cooper-Bessemer Corp. adapted the famous Pratt & Whitney J-57 for ground applications. Its initial use will be pumping natural gas through cross-country pipelines. The turbine will run on gas taken from the pipeline, eliminating the need for a special fuel supply.

GE engineers see a great future for the gas turbine as an inexpensive way of meeting peak demands for electric power (see page 71).

At the other end of the scale, a number of companies are developing small gas turbines characterized by extremely low weight. For example, the Williams Research Corp., Walled Lake, Mich., has built a 75-hp gas turbine that weighs only 75 pounds. Even one of the new lightweight diesels of equal power weighs hundreds of pounds more.

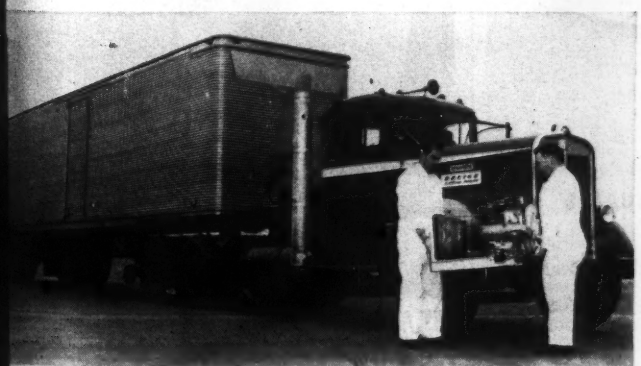
The Garrett Corp., Los Angeles, has sold thousands of baby jet engines for auxiliary power purposes in aircraft and on the ground. The smallest weighs only 45 pounds, yet it produces 30 hp.

The biggest market for gas turbines is, of course, in automobiles. For six years, the General Motors Corp. has been tinkering with turbine power, mainly embodied in its spectacular "Firebird" series of experimental cars. The Chrysler Corp. has taken the more pragmatic route of mounting a gas turbine in a stock car.

Recently, a 1959 Plymouth fitted with a gas turbine averaged 17.17 miles per gallon on a 618-mile run at an average speed of 52 mph. It ran equally well on diesel fuel, jet fuel, and non-leaded gasoline.

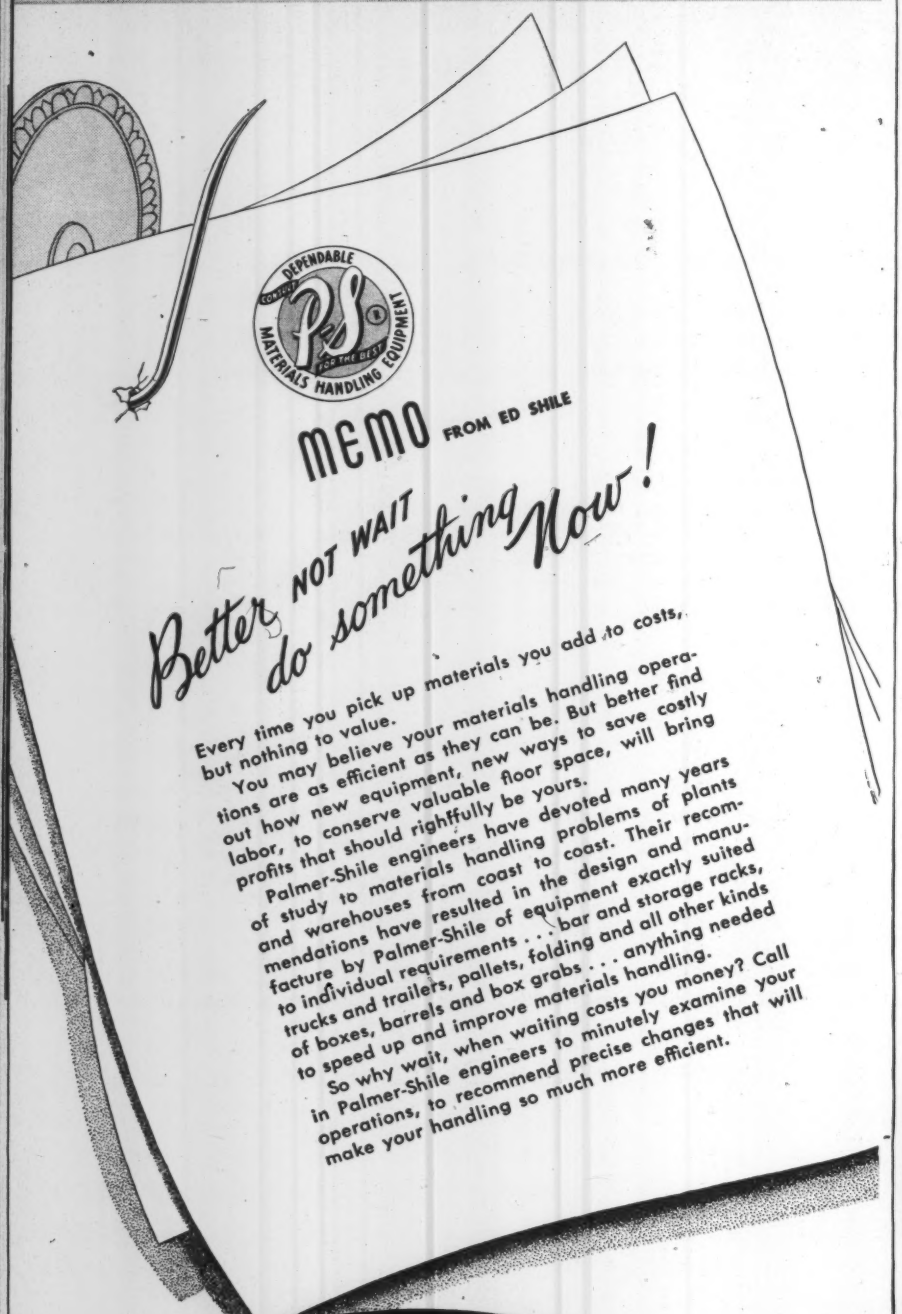
George J. Hoebner, executive engineer in charge of Chrysler's gas turbine research, says: "There is no doubt that we are close to the time when automotive manufacturers will be able to choose between reciprocating engines and gas turbines."

In cars, gas turbines have the advantages of no vibration, fewer moving parts, lighter weight, flexibility in fuels, and no cooling system problems. However, their characteristic high whine must be muffled, and there are obvious problems in high preci-



LIGHT HEAVYWEIGHT: *Two mechanics can lift the 200-pound Boeing gas turbine powering this big Kenworth truck trailer. A comparable 175-hp diesel weighs 3,500 pounds more. In states with low highway weight limits, the difference is paying cargo.*

CUTS PORTAL-TO-PORTAL PAY: *Since oil companies must start paying off-shore drilling crews as soon as they leave the mainland, they are buying fast crew boats like this Sewart boat driven at nearly 40 knots by two Solar Aircraft turbines.*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sion mass production of the turbines.

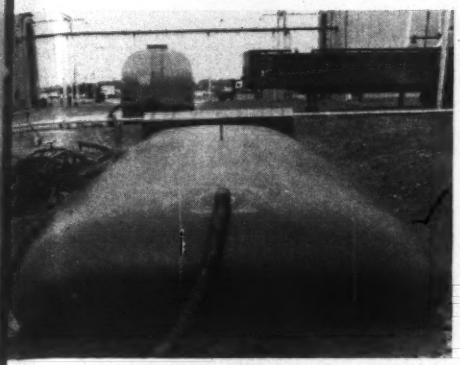
To further undermine the position of the conventional engine, a new internal-combustion engine with only two moving parts has been announced. Developed jointly by Curtiss-Wright Corp. and NSU Works of West Germany, the new "rotary combustion" engine does away with pistons, connecting rods, cam shafts, valves, and all the other moving parts that make up the comparatively complex piston engine. A triangular-shaped rotor and a drive shaft are the only moving parts in the Curtiss-Wright engine, which goes into production late this year.

The model developed by Curtiss-Wright is claimed to produce at 100 horsepower, yet weighs only 100 pounds. If aluminum were substituted for cast iron, the weight would drop below 1 pound per horsepower.

To build more powerful engines, Curtiss-Wright can mount two or more of the basic 100-hp units on the same drive shaft, the way records are stacked on a record changer.

The introduction of the gas turbines and other new power sources such as the free-piston engine, the fuel cell (see page 31), and thermoelectric devices (see DUN'S REVIEW, August 1959, page 78) could disturb the complex supplier-manufacturer relationships based on the internal-combustion engine. Companies that make parts for the conventional engines may have to launch new development programs or face extinction.

KEY ELEMENT: *The still-secret ceramic-like disc at the left is the key to Chrysler's rapid advance in gas turbine technology (see story). When subjected to 2,000° F for 150 hours, it was unharmed, while the high-alloy stainless steel sample at the right disintegrated.*



PRACTICAL PILLOWS: *Industry could take a hint from the Army and use these Goodyear "pillows" for temporary storage of fuels and other liquids. They can be rolled up for easy storage when not in use. Made by Goodyear of rubber-coated nylon, they have a capacity of 10,000 gallons.*

Profits from Headaches

To prevent air pollution, industry is being asked—or forced—to install costly equipment. For example, an electric dust precipitator for a large electric melting furnace costs close to a quarter of a million dollars. The collected dust must then be hauled away and buried at an additional expense.

Now a system has been developed for extracting some return from this normally discarded dust. Essentially, the "Verticone" dampens the dust enough so that it can be handled easily. In the dampened condition, the dust can either be returned to the raw material entry or sent to a plant that extracts by-products from it. For instance, uranium dust is worth a dollar a pound.

Before the Johnson-March Corp., Philadelphia, developed the "Verticone" there was no simple, quick way to dampen dust. Hosing down doesn't work, because water flows off a dust heap like water off a duck's back. One of the first installations of a Verticone is at the Midvale-Heppenstall Corp., also in Philadelphia.

Muscle-bound Capacity

As technological advances result in costlier, more complex plant facilities, they're also creating the problem of decreased flexibility in the productive process. Just as a heavyweight is slower on his feet than a bantamweight, the operation of a massive, highly mechanized, and elaborate productive facility is more difficult to slow down, speed up, and turn on or off than the smaller, old-style factory

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which requires less capital investment per worker.

One industry that is currently experiencing the efficiency vs. flexibility dilemma in particularly acute form is electrical utilities. Today's advanced steam-generating plants, to say nothing of the nuclear plants of tomorrow, can produce economically only if they're kept in steady operation. At the same time, the power needs of the customers—industry and consumers alike—fluctuate, creating the need for standby generating capacity to meet peak power needs. On the average, 20 per cent of total required generating capacity is in use only 2 per cent of the time—and capital investment in the newer facilities is too heavy to lie idle an average of 164 hours a week.

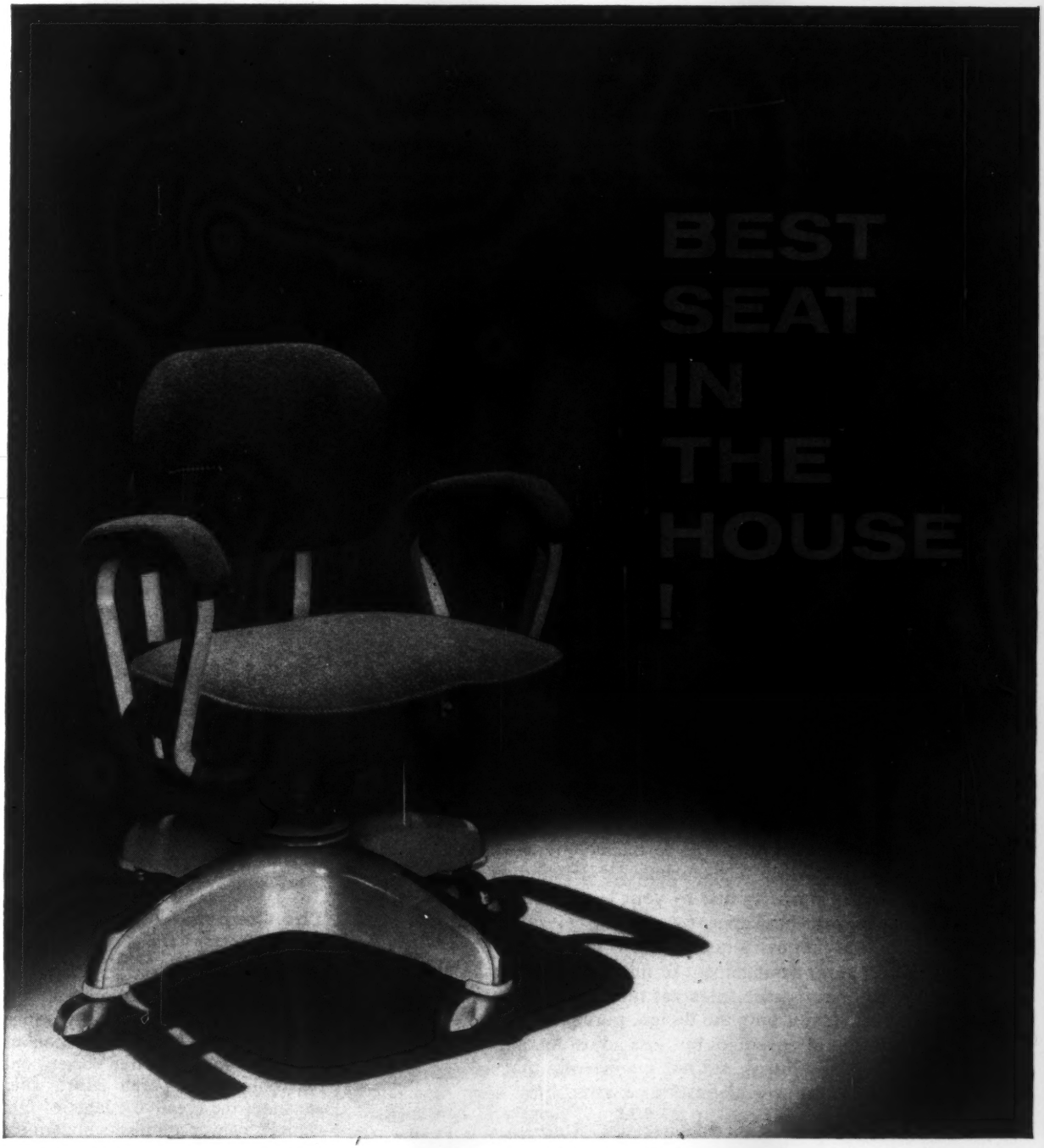
One answer to the problem is a new type of packaged diesel-power generating station, completely automatic in operation, which General Motors' Electromotive Division has developed specifically to meet the industry's need for low-cost standby capacity. Two of the new self-contained stations have already been installed in the Northeast, and more are on the way.

Another solution involves the rapidly maturing fuel cell (see page 31). Since the most efficient fuel for the cell is hydrogen and oxygen, the excess capacity of power systems could be used in off-hours to break down water into its two components—hydrogen and oxygen. As demand rises, the fuel cells could be brought into the system to meet the peak. Banks of fuel cells should represent a much lower capital investment than conventional steam systems for "peaking."

The practicality of atomic power is increased when it is considered in combination with fuel cells for peaking, according to Francis Bacon, English developer of the Hydrox fuel cell, which has been licensed in this country.

Automation Idyll

Many companies that have installed complex automated production lines have discovered that it takes quite a lot more than the flick of a switch to get the whole works running properly. Dr. H. B. Maynard, the management consultant, reports he has observed that a number of these automated lines are kept idling over the weekend so the plant will be assured of smooth operation on Monday morning. —M.M.



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EXECUTIVE BOOKSHELF

Brief Reviews of New Business Books

Power Without Property

PENSION FUNDS AND ECONOMIC POWER *by Paul P. Harbrecht, S.J. The Twentieth Century Fund, 41 East 17th St., New York 21, 328 pages, $5.*

A detailed report on the structure and operation of private pension funds reveals the risks and inequities involved and the ways in which the rapid institutionalization of property ownership is "socializing" the nation's wealth.

Speaking Profitably

CREATIVE DISCUSSION *by Rupert L. Cortright and George L. Hinds. The Macmillan Company, 60 Fifth Ave., New York 11, 303 pages, $6.*

How to plan, control, and profitably utilize all types of group discussions. The authors offer practical advice on psychology, semantics, and speech to make you a better listener and a more effective speaker.

Put It in Writing

PRODUCTIVE BUSINESS WRITING *by William P. Boyd and Raymond V. Lesikar. Prentice-Hall, Inc., 70 Fifth Ave., New York 11, 513 pages, $8.*

An executive's guide to the techniques which produce clear, concise, result-getting reports and business letters for all occasions. Includes helpful tips on organizing material for speedier dictation.

The Corporate Way

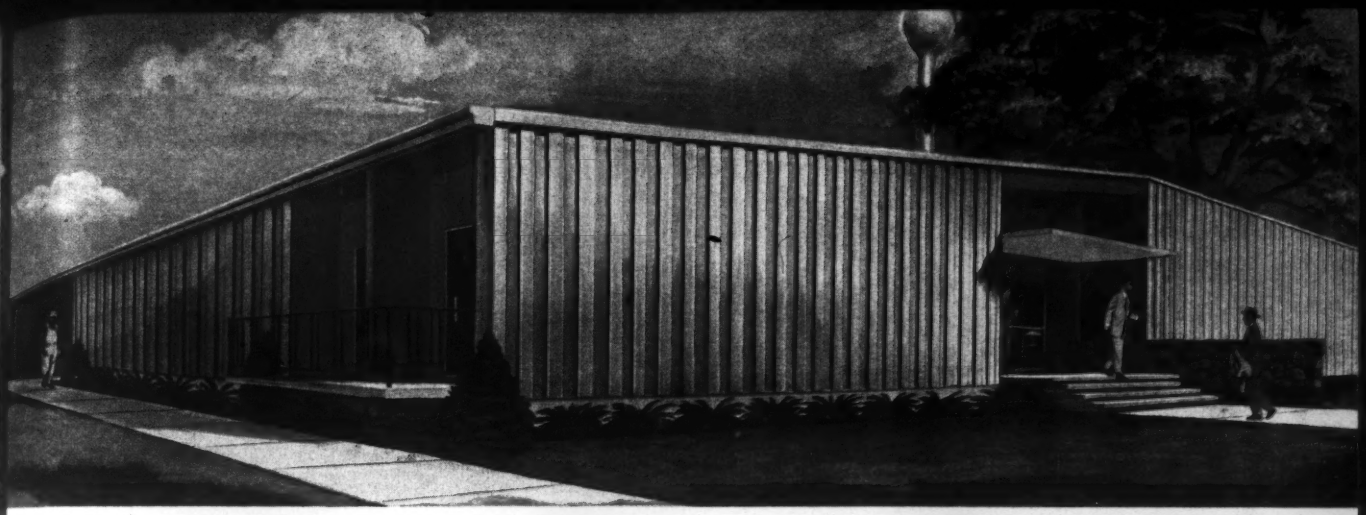
FREE MAN AND THE CORPORATION *by Roger M. Blough. McGraw-Hill Book Company, Inc., 330 West 42nd St., New York 36, 126 pages, $4.50.*

A key industrialist analyzes the inner workings of the giant corporation and concludes that in a free society only the voluntary corporate effort, which enhances the creative talents of individuals, can accomplish modern-size jobs.

Spending Strategy

THE MANAGEMENT OF CORPORATE CAPITAL *edited by Ezra Solomon. The Free Press of Glencoe, Ill., 327 pages, $7.50.*

This anthology of 22 essays by experts examines investment analysis, debt and equity financing, abandonment strategy, and explains the processes by which management decides how to allocate its capital for optimum return.



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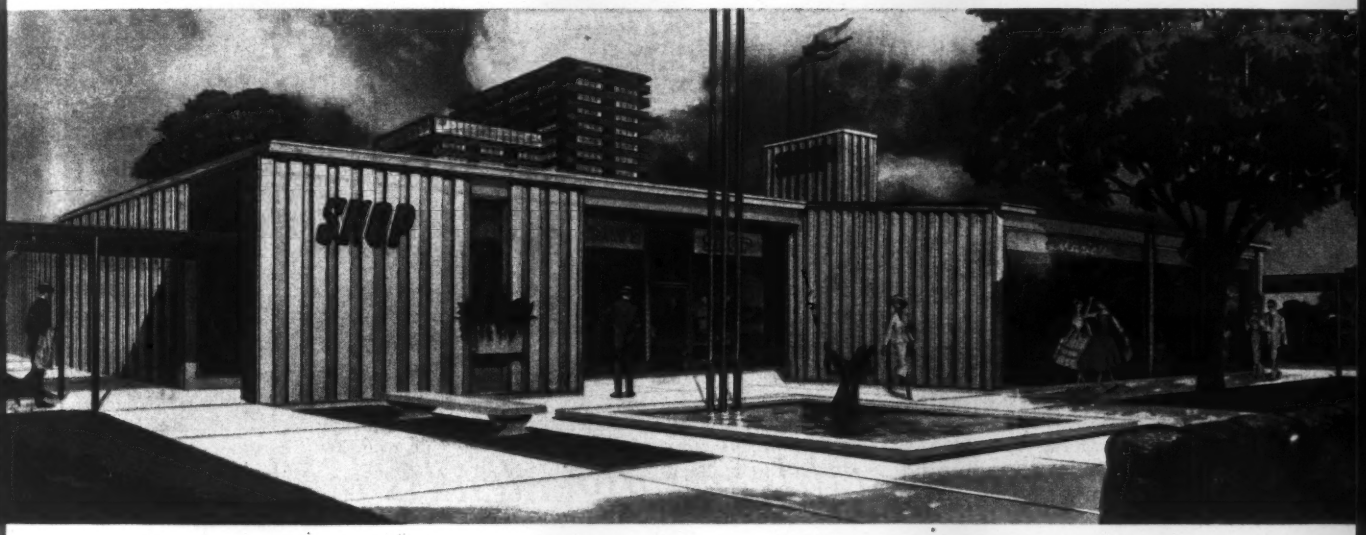

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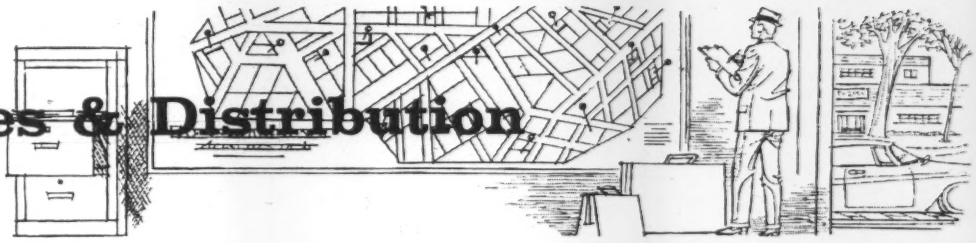

- ✓ *Survey reveals woes of the Main Street merchant*
- ✓ *The shopping mall stirs interest across the nation*
- ✓ *New light on how companies plan for new products*

Beleaguered Independents

The mainstay of Main Street in decades past—the independent store—is battling for its life today. Although it probably will escape extinction, its share of the retail market is dwindling rapidly. An informal survey by the National Retail Merchants Association lists 118 independent stores that either have been so'd or have failed since 1955—and these stores had a sales volume of close to $650 million.

The spread of shopping centers, supermarkets, and discount houses has added to the worries of the independent store operator. But, although the bulk of food is now sold through chains, in many lines—hardware, appliances, clothing, to name a few—independent merchants continue, as a group, to outsell the organization stores. And the independent department store still accounts for a sizable share—about 25 per cent—of total department store volume. Nevertheless, almost 60 per cent of the independent department stores that existed in 1929 no longer were in the ranks of the independents 25 years later.

The NRMA survey of 141 independent merchants, who last year had sales of $1.8 billion, pinpoints both the present-day headaches of the independent store operator and the remedies that he is trying. The survey was augmented and confirmed by the opinions of 38 executives of buying offices serving independent stores. Here are some of the highlights from the report:

- Like Willie Loman in Arthur Miller's *The Death of a Salesman,* the independent store operator has a habit of living in the past. This was mentioned more often than any other weakness. Comments J. Gordon Dakins, executive vice president, NRMA: "Apparently, too many independent stores believe that reputation in the past should assure success today. They confine their efforts to maintaining their so-called 'own' clientele and do not creatively merchandise to acquire their share of the new business made possible by our growing population."
- The independent store, the survey shows, is also hampered by weak management (long-time one-man or one-family control); lack of capital; and the impact of estate taxes, which is a contributing cause of many mergers and acquisitions.
- The survey reveals that the independent store operator has many remedies available to him and that he is moving to take advantage of them. Foremost is the building of a distinctive store image or personality —something that is not easily done by the chain outlet.
- Independent stores are also moving to affiliate with top-flight buying offices so as to gain the same advantage in low-cost quantity purchases as do chain operators. Independent stores are also concentrating on more complete services for shoppers, more personalized service, and more branch stores in thriving suburban locations.
- And now, more than ever, the independent store merchants are banding together to exchange operating information and to solve the prob-

PRESIDENT ALVIN COHN (*left*) *of Continental Coffee Company, Chicago, goes along with salesman Bob Stastny on his daily rounds in Cedar Rapids, Iowa. In small companies, it's not unusual for the top man to accompany his salesmen from time to time. But when the president of a $30 million corporation devotes one week out of every four to making sales calls, it is certainly a departure.*

Benefits so far are improved morale among the salesmen and greater customer loyalty. Both groups feel the top man has a direct interest in their problems.

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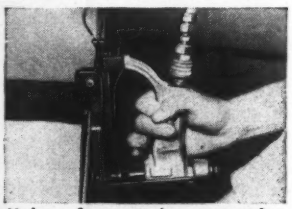

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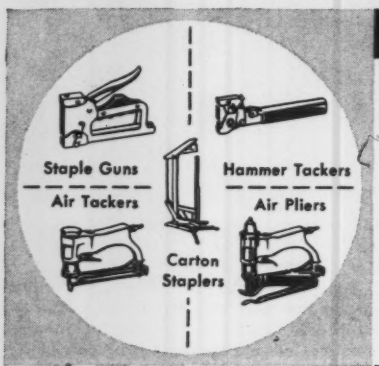

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lems of the deteriorating state of selling on Main Street, USA.

In addition, wholesalers are now taking steps to help the independents in their efforts to develop joint programs for the benefit of all participants. The rapid growth in the past few years of voluntary coöperatives among food retailers also points to a pattern that may emerge for other independents in the years ahead.

On the Mall

In more than 50 cities across the nation plans are being made for a new approach to the problems of the downtown merchant and the pedestrian. The plans—which are in varied stages ranging from preliminary investigation to actual ground-breaking—call for the construction of park-like shopping malls, free of automobile traffic but festooned with greenery, statuary, and fountains, in the older downtown shopping districts.

The theory is that, along with the elimination of motor vehicle traffic, the pleasant atmosphere thus created —plus the informal, "community center" aspects of the mall—will stimulate the consumer's buying mood.

Although experimental malls have operated in several cities—last fall a fifteen-week experiment came to an end in downtown Toledo, Ohio—only one city, Kalamazoo, Mich., has gone so far as to tear up the asphalt and plant grass on its main shopping street.

Experts such as architect Victor Gruen, who developed plans for a full-scale permanent mall in Fort Worth—it was never built but stirred initial interest in the idea—point out that presently conceived shopping malls are poor substitutes for a thoroughgoing planned approach to solving the downtown shopping problem. They insist that closing off traffic and placing potted shrubs about the street merely glosses over the real problems of traffic congestion, inadequate parking, and urban blight, and that the downtown mall is in itself no panacea.

Although the present-day downtown malls may not solve the pressing problems of parking and traffic congestion (in fact, they may add to these problems), they do create a relaxed atmosphere that attracts shoppers.

Says Phillip J. Zeller, Jr., execu-

tive secretary of the Toledo Downtown Association:

"There is a factor in the success of the malls which many people, I'm certain, will regard as of minor importance but which is actually of extreme significance. That is the number of women we have seen on the streets of downtown Toledo wearing Bermuda shorts and sports clothes. This is the kind of atmosphere downtown sections need to encourage, for it represents part of the success of the suburban shopping centers. We must encourage our customers to come as they are, and this has been accomplished by malls."

In other parts of the nation, consumer reaction has also been encouraging. A survey of 2,500 people in Hempstead, Long Island, where a shopping mall was tried for eleven days last fall, revealed that 90 per cent would like to have the mall as a permanent fixture.

However, the reaction of the merchants directly involved in shopping malls is not so enthusiastic. Nearly one-third of the merchants doing business on the Toledo mall were not in favor of its continuance. Many of the Hempstead retailers enjoyed hefty increases in their sales during the mall days. However, the gains may be simply the result of the temporary interest stirred by the newness of the mall idea. And in the long run, the mall may pall as the suburban shopper returns to what is getting to be his natural habitat—the sprawling shopping center.

Where Ideas Are Born

In most industries, new products provide the essential edge in the race to stay ahead of competition. Many companies report that most of their volume today comes from products that did not exist just a decade ago. The immense importance of new products is also reflected in the emergence of new product departments in many companies. Since four out of five new products fail, companies are seeking new methods to come up with consistent winners.

A new survey of 252 companies made by the American Management Association reveals that the responsibility for the creation of new products now rests with marketing management in 43 per cent, with general management in 41 per cent, and with directors of research and development

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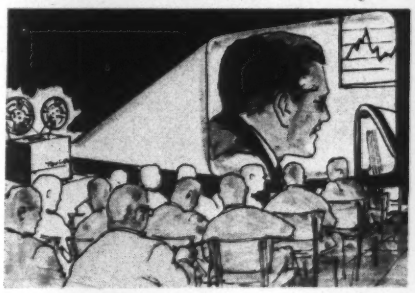

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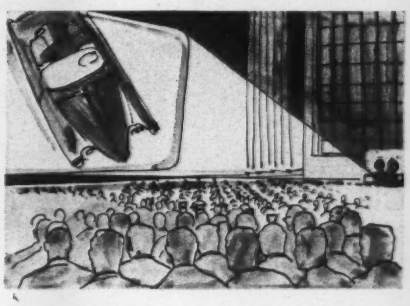

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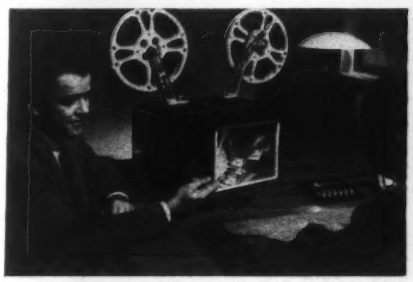
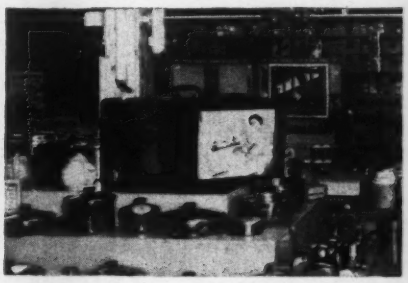


Your representatives tell and sell your customers and their salespeople with this TV-type showing in an undarkened room. One to 40 persons.



Now—*reach the consumers.* Use repeater-magazine projector showings on retail store counters; at shows and exhibits; at traffic points (airports, etc.).

tsi
TELL·SELL·INSTRUCT

Technical Service, Inc. 60-1
30865 Five Mile Road, Livonia, Michigan

☐ SEND FOLDER telling how TSI projectors can give us more selling usage of 16mm films.

☐ Tell us about TSI's projector leasing plan.

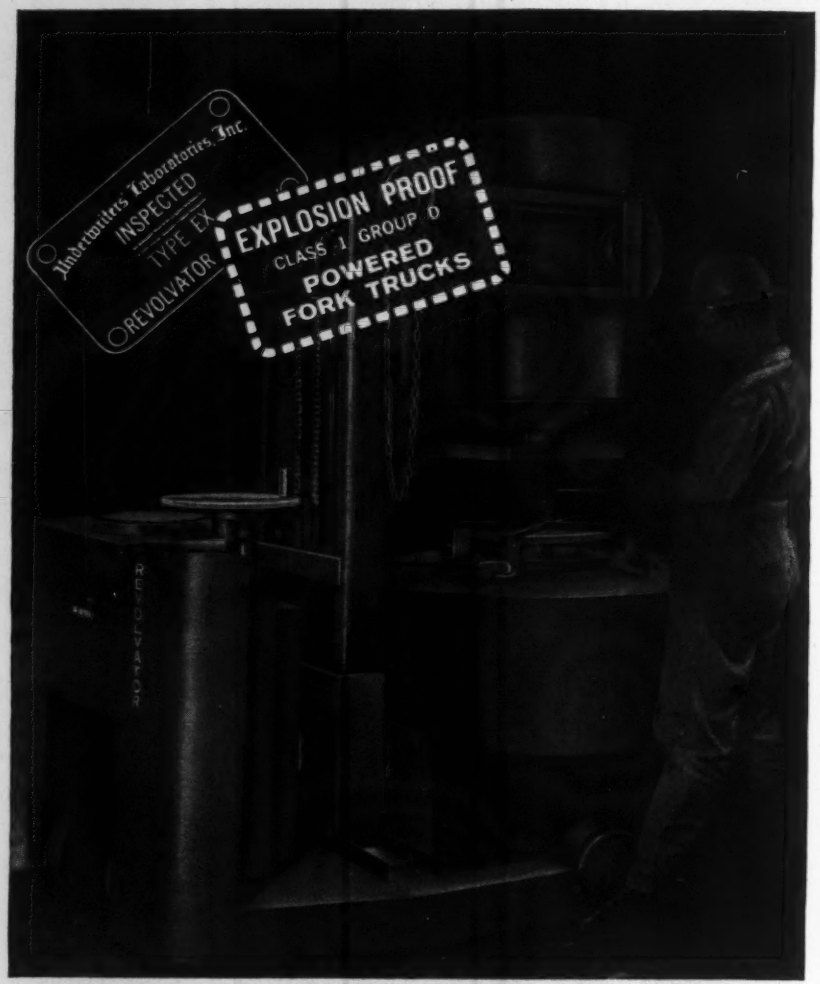
NAME_____

TITLE_____

COMPANY_____

ADDRESS_____

or phone Sales Dept., KEnwood 3-8800, Detroit.



GO-GETTER CUTS COSTS IN HALF; MAKES JOB SAFER

A leading chemical plant faced with the double explosion hazard of ethylbenzene fumes and aluminum chloride dust, solved its material handling problems – and saved money in the process – through the use of Revolvator's new fork lift trucks labeled Type Ex by Underwriters' Laboratories for Class 1 Group D explosion hazardous areas.

Previously, two men with a hand truck were required for this operation. Since the introduction of the Explosion Proof Go-Getter, one operator easily charges the hoppers in a safe manner with a minimum effort. "What used to be a dangerous, disagreeable job has now become a simple task," says the plant manager.

The explosion proof Go-Getter, available in 12 standard models, is but the latest development in Revolvator's better than a half century of experience in materials handling equipment covering standard walkie lift trucks, hand lift trucks, portable elevators and related equipment.

REVOLVATOR CO.

8702 TONNELE AVENUE, NORTH BERGEN, N. J.
SINCE 1904

or engineering in only 11 per cent of the surveyed concerns.

The overwhelming majority agree that best results can be attained when the product planners report directly to top management—the president, general manager, or executive vice president.

One-third of the surveyed companies use product planning committees to involve all the company departments affected by the development of a new product. Sometimes, the entire responsibility for the planning of new products is given over to the committee, but more frequently the committee is advisory.

What are the best sources for new product ideas? About two-thirds of the surveyed companies consider their own salesmen as their best idea source. Next in popularity are research and engineering staffs, followed by suggestions from customers.

Other sources mentioned were the market research departments, distributors, and analyses of competitors' experiences. Only three companies mentioned employee suggestions as a source.

What classes of new products are now being planned in industry? Of the 134 industrial products companies surveyed, 38 are most concerned with products that will complete their lines. Thirty-five are developing products to give better performance than do present-day products. Twenty-three companies are developing lower-cost products, and a similar number are planning more reliable products.

Twenty-five of the industrial companies are preparing products to be sold as a system or package, and eleven are planning miniature or lighter-weight products.

Grass Roots PR

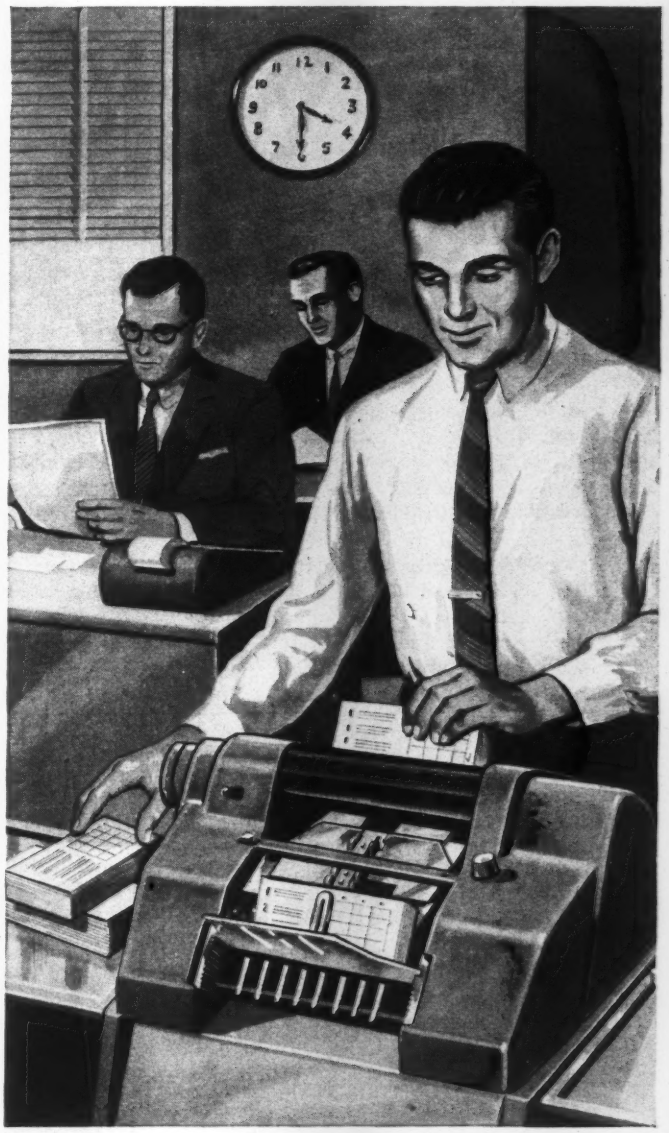
The most important link in a company's public relations chain is the man —whether he is door-to-door salesman or retailer—who meets the public face to face. To strengthen this link, drug manufacturer Eli Lilly and Company has come up with a new idea—a monthly newsletter of public relations advice for the nation's 100,000 pharmacists.

The bulletin will offer advice on such things as how to handle customer complaints about prescription costs, as well as conversational tidbits to enhance the stature of the man in the white coat. —T.K.

Daily records

can be completed earlier

If you are hand-counting job tickets, orders, materials receipts, shipment duplicates, sales slips, checks, warrants, etc., especially at the end of the day—get a Tickometer. It counts eight times as fast as you can, and more accurately; will save time and effort, and help finish your daily records earlier.



- The Tickometer is so accurate that banks even use it to count currency, handles from 400 to 1000 pieces a minute. Can be set for a predetermined count, or to show partial totals as well as full totals. Self feeding and stacking, it is easy to set and operate, can be used by anybody. Disposes of a monotonous job, saves time, and frees office people for more important work.

- The Tickometer can also stamp, mark, code, endorse, cancel labels, forms, coupons, checks, cards, tickets. Imprints on most weights and finishes of paper and light card from 1 by 2 to 15 by 15 inches. With an accessory, it can be used for consecutive numbering.

- The Tickometer can be bought or rented. And Pitney-Bowes service is quick and convenient, from 304 points. Ask the nearest Pitney-Bowes office to show you how the Tickometer can help in your office. Or send coupon for free illustrated booklet and case studies.

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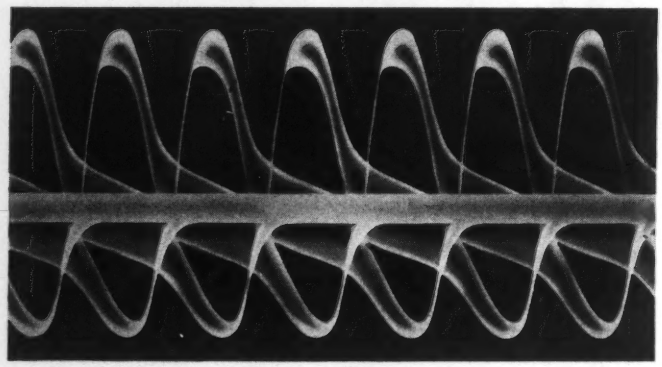
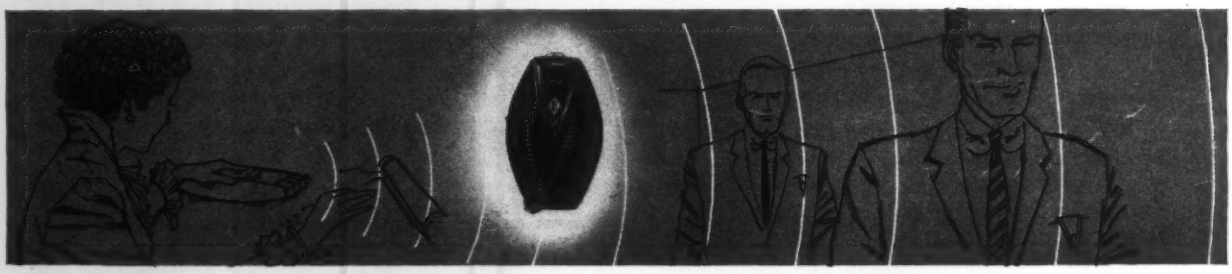


On rare occasions a few men of rare talent join forces . . . and the working world reaps the benefits of undreamed-of new efficiency and economy. Such an occasion has been the formation of United States Communications, Inc. In the development of electronic and ultra-sonic aids to business and industrial communications, this company has arrived at several remarkable new products. They all provide revolutionary new answers to key problems. They all represent something their creators call "engineering beyond the expected". For details on these products and systems, write to United States Communications, located in an unfettered world of electronic technology, Hicksville, Long Island, N. Y.

ENGINEERING . . . BEYOND THE EXPECTED



EXAMPLE: *The new "Electropage®" System is now bringing startling new wireless voice paging to every kind of office, plant, and institution. You speak instantly to anyone in buildings or grounds. No wires, bells, buzzers or lights. Each person "wears" a pocket-size "walkie-talkie". Tiny — but powerful. Foolproof. Low cost. Inquire.*

United States Communications, inc.
Hicksville, New York

Big Business Talks Back

✓ *To answer the critics of "bigness," corporation presidents recommend old methods with new twists..*

✓ *Basic needs: better public relations, new dedication to fair competition, and real corporate citizenship.*

AMERICA'S booming postwar economy has created more products, a higher standard of living, and bigger businesses. As the big companies have prospered, their critics have become more vocal. Sheer size, in the minds of a growing segment of the public, is somehow suspect.

Unreasonable though it may be, this hostility has hurt. So say the presidents of a representative group of top U.S. corporations surveyed by DUN'S REVIEW. But, they believe, there are effective ways to counter the criticism and restore public confidence in the motives of big business.

The 101 presidents questioned by DUN'S REVIEW head companies that average more than $200 million in annual net sales. They were asked, "In your opinion, what can big business do to counteract effectively the frequently expressed attitude that 'bigness' is bad?"

Their answers showed an awareness that big business has the facts to answer the critics, although perhaps it has not yet found the effective means of expressing them.

Says one corporation head, "The problem of 'bigness' involves economic, moral, political, and sociological factors. As usual, there are many arguments on both sides of the question. I believe the facts indicate that bigness in itself is not against the public interest."

Actually, of course, corporate size is often both cause and result of success. Modern technology puts an economic premium on large, efficient production units. And success in competition leads naturally to growth. But most of our biggest enterprises had modest beginnings—and the industrial giants of tomorrow will emerge from among the lively business small-fry of today.

Some business economists like the late Sumner Slichter have pointed out that business growth actually has paralleled the growth of all other American institutions within the U.S. Other data demonstrate that big business is dynamic, not static. A 50-year DUN & BRADSTREET analysis, for example, shows that the turnover in business population, not counting successions, is about 10 per cent a year. This average rate of change doesn't seem to have been affected by merger waves or the growth of the conspicuously bigger companies.

Fighting the Myth of Bigness

Leaders of 101 of America's big corporations say there are four major ways to battle the popular notion that bigness is necessarily bad:

- Improve public relations and education to give a realistic picture of big business and how it operates (68 presidents).
- Explain and demonstrate the contribution of big business in research and producing goods (27 presidents).
- Treat suppliers, consumers, and competitors fairly. Respect antitrust laws and exercise more self-discipline (17 presidents).
- Be a good citizen. Assume social, political, national, and community responsibility (13 presidents).

Added up in a coherent statement, here is the program of action the DUN'S REVIEW Panel presidents recommend for American big business as a whole:

Use better public relations to give the public a realistic picture of big business and a clearer understanding that large companies are, in the words of one president, "essentially people-oriented."

Human values should be emphasized. One president says public relations should "make the human side of the corporation more visible" and should point out that "corporations, like men, are judged by their deeds and not by their size."

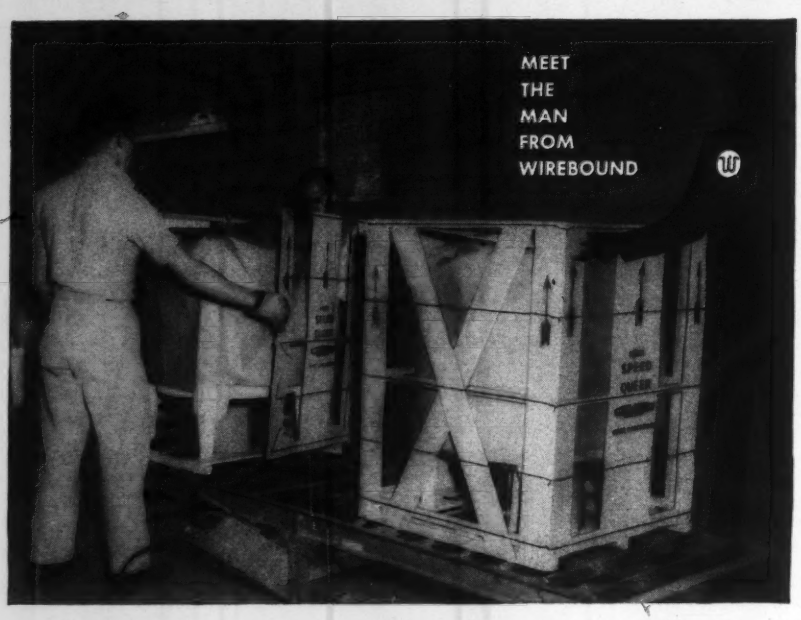
A number of company chiefs emphasize the need to start economic education at the school level. "Start in the school system," says one. "Promote the teaching of fundamental economics at all educational levels," says another.

Some of the presidents suggested more effective use of messages to stockholders and engendering "increased stockholder support of corporate operations."

The large corporation should support industry-wide public relations, says one president. Another suggests, "Support the organizational approach such as the National Association of Manufacturers."

One Panelist says big corporations should "stop hiding their light under a bushel" and tell the public that big business, "with its research, strong competition, sales and production facilities has made it possible for Americans to have more of everything."

Two of the presidents call for a new advertising approach. They say big business should do more institutional



"Appliances get there *right* in Wirebounds"...says Speed Queen

"Wirebounds have no equal in getting our washers and dryers to dealers in top condition," reports Mr. R. M. Cornwall, director of purchases for the Speed Queen Division of McGraw-Edison Co., Ripon, Wisconsin. "The package development assistance provided us by the Man from Wirebound has helped us obtain three-way improvement of shipment protection, warehousing and packing."

Superior shipment protection. Wirebounds take the bumps and squeezes of shipment better than other containers. Their construction eliminates "hidden" damage.

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9734

advertising and push for "greater integrity in advertising."

Demonstrate the economic contribution of big business. One chief executive says big corporations could best answer their critics by turning in a "good record of performance, giving the public full value. They should let it be known that bigness is economic, that smallness is expensive."

Treat everyone fairly and refraining from squeezing suppliers, the market, or competition. A sizable group of presidents—16 out of 101—stress that big business must refrain from "unfair" economic practices. Some of their comments:

- "Avoid customer pressure tactics which force customers to restrict their purchases to the big companies."
- "Stop misusing size, especially through over use of reciprocity as a tool to force others to buy from or sell to you. Stop pushing suppliers around."
- "Be careful to compete fairly with small competitors on the basis of price and quality."
- "Adopt reasonable licensing policies on patents."
- "Respect our present antitrust laws, stop further vertical integration," and "use more self-discipline."

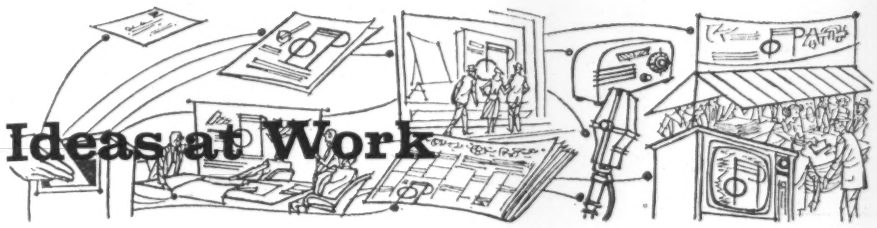
The president of a smaller company says the big corporations should "raise the general level or morality and integrity of their executives and managements."

Take a more active interest in local and national affairs. Most of the Panel presidents show in their suggestions a realization that criticism of big business, however it may be stated, often stems from social, political, and moral beliefs, which in turn must be countered in the social, political, and moral spheres.

One president says a corporation should be "a good citizen in all respects, take part and interest in community affairs." Another speaks of a "sincere, effective concern for matters in the general area of 'public interest.' "

In the entire group there are only two men who say or imply that big business should simply ignore the criticism. The spirit of the overwhelming majority is expressed by one chief executive this way, "Let big companies conduct themselves in a manner that proves they are effective and useful to the country as a whole."

—J. R. M.



Ideas at Work

- *Found: 60 Golden Minutes*
- *Worker Certification Boosts Standards*
- *Subordinates Judge Supervisory Skill*

A Full Day's Work

At the Thompson Ramo Wooldridge plant in Cleveland, management is recouping a good percentage of the costly 60 minutes a day employees usually fritter away at the beginning and end of each shift.

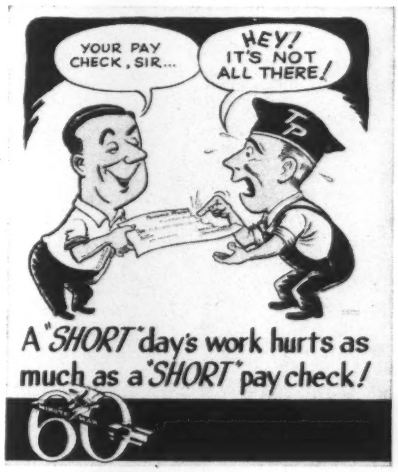
Appealing to the employee's sense of fairness and his pride in a job well done, the company launched a program to encourage full production during those critical periods of the day.

The Human Relations staff devised a campaign based on the concept of the "60 minute man." The term was borrowed from competitive sports, where it's used to compliment a player who stays in the game from beginning to end.

A letter from the company president was sent to each employee, explaining the importance of a full day's work for a full day's pay. Posters illustrating the cost of lost time and how the employee would protest if he were short-changed on his paycheck as the company is short-changed when it pays the worker for dawdling (see illustration).

The employee newspaper carried pictures, editorials, and news stories about the program, and a contest was held to solicit new poster ideas from the workers. Prizes included a vacation trip, bicycles, television sets, radios, and other merchandise. More than 1,400 ideas were submitted.

Although it is difficult to pin down the dollar savings resulting from the program, during the campaign rising costs in many areas were held in check, and in numerous instances, significant cost reductions were effected. One division, which had been making a profit of about 4 per cent before taxes, was able to increase this figure to 16 per cent. All divisions increased their profit margins, and a great many cost-savings steps were introduced throughout the company. Supervision was improved, and cost-consciousness throughout the workforce noticeably increased.



Every Man a Professional

Professional certification of all its employees is helping the Bekins Van & Storage Company of Los Angeles improve service, up-grade worker training, and establish industry standards.

The certification program (which could work in other companies as well) began last year with all blue-collar drivers, packers, helpers, and warehousemen. The results have been so encouraging and the workers' response so enthusiastic that the program has been extended (with union approval) to cover all employee groups. Personnel Director Lloyd Erxleben estimates the job will take two to three years to complete.

First step in the plan is intensive on-the-job training, coupled with discussions of how each employee's duties fit into the total plant operation. When his training is completed, the employee appears before a certifying board and takes a written and oral test covering job duties, safety rules, company procedures, the handling of paperwork, customer relations, and so on.

Those who pass the tests receive professional certification cards. Those who fail all or part of the test are allowed to retrain and take it again. Employees who just squeak through are spot checked in the field until they show improvement.

Rate the Boss

To encourage the self-development of its technical supervisors, the Esso Research and Engineering Company, Linden, N.J., points out their strengths and weaknesses in a personal analysis made not by management but by their subordinates.

Employees participating in the "Rate Your Supervisor" program anonymously grade their immediate superiors on personal traits and job methods. They also evaluate the man to whom their supervisor reports. Finally, to build up the sample, a rating form is filled out for any supervisor for whom the rater has performed

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With the opening of an office at 71 Piccadilly, London, England, Beneficial is the first American consumer finance organization to extend its service to Europe. This adds a new frontier to the world's largest system of finance offices already serving in 47 states — including Alaska and Hawaii — and in all ten provinces of Canada.

The London office brings to that metropolis a finance service operating on the same proven principles employed by Beneficial over the past 45 years. This office will also play an important part in servicing a number of international airlines using the Beneficial world-wide Go Now—Pay Later plan.

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work during the twelve months preceding the evaluation.

The rating forms are sent to the employee relations department where the information is combined in a single report for each supervisor. In addition to a percentage breakdown of his own ratings on each item, the supervisor receives a percentage breakdown on the ratings for all supervisors at his level in the company and in his division. The open-end questions on the evaluation form are paraphrased and included with the machine tabulation in the report.

No one in the company knows how an individual is rated except the man himself. He interprets the report as he wishes and changes his performance, looks for help, or takes other action as he sees fit.

As for the benefits of the program, an opinion survey of both raters and ratees revealed that: 25 per cent of the subordinates said they had seen lasting changes in their supervisors; 88 per cent of the supervisors said they had tried to change after getting their reports; 60 per cent of both supervisors and subordinates agreed that productivity had been favorably affected by the program; and 75 per cent of the supervisors wanted a second run.

Double Duty for R&D Men

Researchers on the laboratory side of an electroplating supply company have been recruited to take part directly in a vital production program. The company is saving money and the research men are enjoying the change of pace.

The novel arrangement came about when the Udylite Corp. of Detroit found that its regular chemical suppliers could not afford to produce small-batch quantities of the highly specialized chemicals used by Udylite in its electroplating processes.

Since the chemicals needed, in most cases, had been developed originally by the company's research group, the Udylite Research Corp., it was decided to let the researchers manufacture them.

Dr. Henry Brown, director of research, explains that "doing our own production under strict observation of laboratory-oriented people permits us to satisfy the strict requirements of our own products and to do so at costs which are not prohibitive. But as research men, we will, of course,

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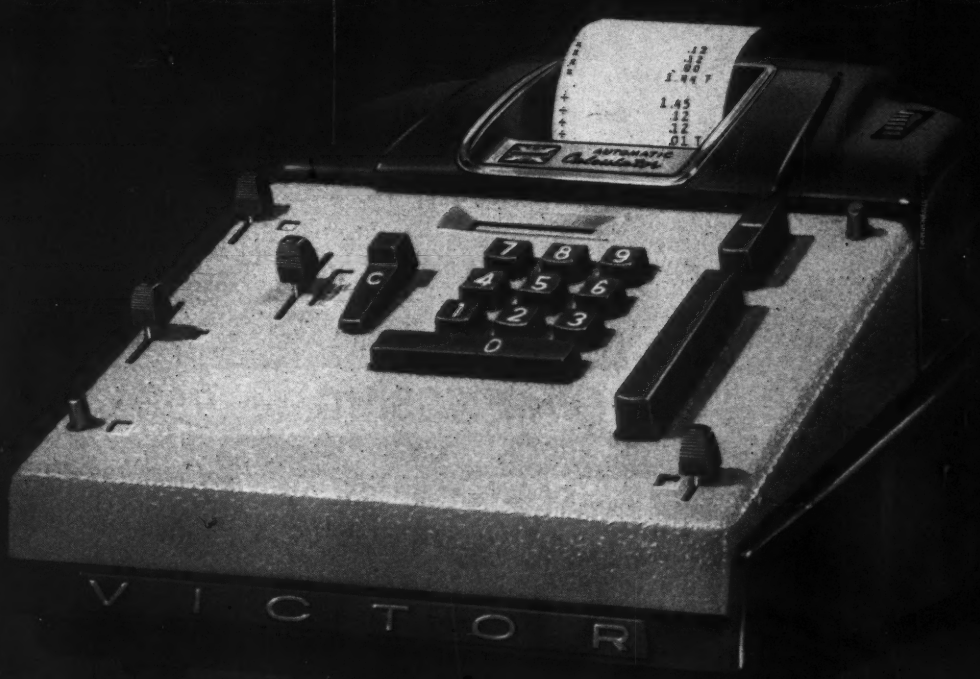

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Combined movement and processing means metal parts, foods, ceramics or chemicals are processed faster, more uniformly—without costly manual handling. High product quality is maintained because heat, cold or liquids flow through the belt and around the product for thorough treatment. Cambridge Belts save on operating costs, too. Superior belt design and manufacturing techniques mean longer life, fewer repairs, lower operating costs. Belts can be made heatproof, coldproof or acidproof—in any mesh, weave, metal or alloy—with any side or surface attachments.

Whether you're designing machinery for your own use, or for resale, the Cambridge Field Engineer in your area will be glad to discuss the many advantages of Cambridge Belts—from the manufacturing end to installation and service. Call him today. He's listed in the yellow pages under "Belting, Mechanical". Or, write for FREE 130-PAGE REFERENCE MANUAL.

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be happy to turn over manufacturing problems to any supplier who can develop satisfactory quality and price."

School for Rapid Readers

Job-related reading eats up hours of a professional or technical employee's costly time. When E. I. du Pont de Nemours & Company, Wilmington, Del., discovered that its engineers were spending nine hours weekly keeping up with technical journals and reports, it set up a fifteen-hour rapid reading course for all technical employees. At the end of the course, the employees had doubled, and in some cases, tripled their reading speeds and were getting through more material in less time. For a year following the training, refresher exercises are sent out regularly to the graduates.

A Word from Our Employees

A write-your-own-commercial contest recently helped stir up employee interest in the Westinghouse Electric Corp. and its products.

All employees except those in sales promotion, advertising, and information departments were invited to submit a one-minute radio or TV commercial for Westinghouse products. Nearly 1,000 entries were received.

The vice presidents of three top advertising agencies chose the top entry, and the winner received her pick of company products retail priced at $500. Other prizes were awarded to 200 runners-up.

Car Pools in Peacetime

The car pool, born of wartime fuel and tire shortages, is still a thriving operation at the Martin Company in Baltimore. Some 70 per cent of Martin's 16,000 employees are included in the ride-sharing program.

A coded file of the names and addresses of drivers is maintained in the company's personnel office. Employees seeking rides are given the names of drivers who live in their neighborhoods.

Periodically, campaigns are conducted to encourage more driver participation and to update the files.

Charles E. Crowley, Martin's director of industrial relations, says the plan "aids materially in maintaining good employee relations and eases parking and traffic on the plant's highway approaches." — C. K.

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When you put a P-A-X phone on your desk, you've put money in your pocket! The P-A-X system handles all inside calls with lightning speed, so *things get done.* Customers' calls get prompt, intelligent service, too; P-A-X frees your operator to devote her full time and attention to outside and toll calls. This business telephone system improves both inside and outside service!

If busy signals are bottlenecking your organization, investigate P-A-X today. Write Director, P-A-X Sales, Automatic Electric Sales Corporation, Northlake, Illinois.

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Capital Views & Previews

Commerce Secretary Mueller sees economic policy battle ahead

PAUL WOOTON

Frederick H. Mueller

IF ever there was a public policy battle in which business has a stake, it is the one now impending in the election-year session of the Congress, says Secretary of Commerce Frederick H. Mueller. Prudent economic progress, he warns, will be determinedly attacked, and a drive will be made to move more economic planning from the marketplace to the merry-go-round of politics.

"Pie-in-the-sky growth through massive Government intervention and spending will be attempted," Secretary Mueller predicts. "We have gained a bridgehead against 'squandermania,' but the spenders, by skillful manipulation of facts, figures, and semantics, are again striving for big central Government and strict Federal controls. They continue to speak the dead language of class struggle."

Mueller, who was a Grand Rapids furniture manufacturer before entering Government service, advises business men to steer clear of false prophets. The road to the left, he adds, "leads to less freedom, fewer jobs, more taxes, larger national debt, and thieving inflation. Radical tom toms continually beat out anti-business propaganda."

Secretary Mueller speaks glowingly of the economic system the Administration is seeking to preserve. "By any standard of measurement, we have the largest free market in the world. We have a free enterprise economy that contributes 80 per cent to the gross national product. We have a business community with the greatest congregation of brains, competitive spirit, and ingenuity ever dedicated to raising the standard of living of all the people.

"I favor," he continues, "the zealous encouragement of economic growth by putting a premium on savings, investment, better value for the consumer's dollar, and productive employment. I am against forced-draft economic growth and use of dope to loosen credit and to spur artificial expansion."

Mueller believes expenditures that do not add to the nation's productivity are merely a means of transferring wealth, not creating it, and submits that the acid test of what we can afford to pay for Government is the amount we are willing to pay in taxes, not through the hidden and destructive method of inflation.

Needed: defenders of capitalism

Secretary Mueller feels strongly that the time has come for American business men to stand up and be counted as champions of private enterprise.

They should assert active, articulate leadership in public affairs and engage in personal political action from town halls to Capitol Hill, the Secretary asserts.

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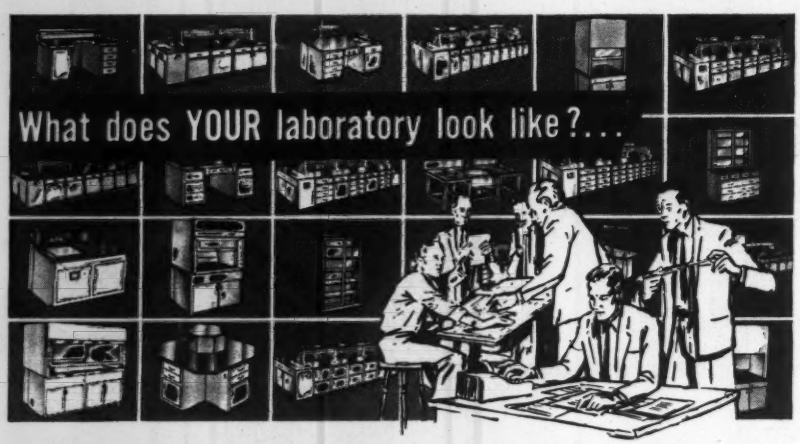

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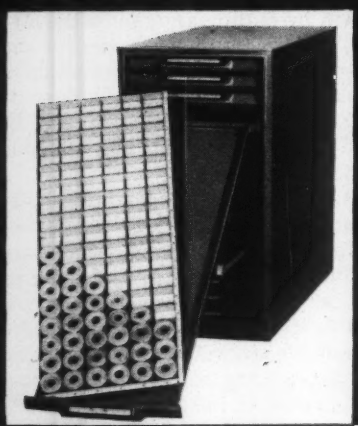

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He urges business men to make speeches on upcoming issues, write letters, give interviews to the press, use institutional advertising, testify at hearings, brief Congressmen.

In short, he says, they should use their successful sales techniques in the marketplace of political ideas, and back responsible candidates with advice, leg work, and checkbooks.

Mueller warns that there are obstacles in the way of sound public and private policy. He cites the steel strike as an example: "Just when American workers 'never had it so good'—just when production and income were soaring to record heights—just when the greatest prosperity was within our grasp—the rug was pulled out from under the economy."

The conviction is growing, the Secretary says, that in this hazardous world, our country dare not risk the crippling effects of nationwide strikes in basic industries. "Equitable and workable ways," he states, "must be found to forestall work stoppages. The public interest must be respected. American workers can then join forces and produce miracles of achievement. If productivity is discouraged or if its fruits are not shared with all economic groups, we shall have thrown away the greatest opportunity for plenty ever offered."

A decade of growth

For the "fateful" decade of 1960–1970, Secretary Mueller foresees "economic growth dwarfing our previous accomplishments." In zooming population growth and the flood of new products coming from research labs, he sees unprecedented opportunities for expanding employment, capital investment, and sales.

"The next ten years will see deep penetration into a technological wonderland," he predicts. "Powerful forces are building up below the surface of the American economy which insure its expansion to ever-increasing height. Never before has our industrial sector been better prepared to promote the cause of peace or to meet a defense emergency."

The Secretary believes that if Americans have enough economic wisdom to achieve prosperity, they will be responsible enough to preserve it. And he reiterates that "our unparalled economic advance has been made possible by a free enterprise economy and a free political system." END

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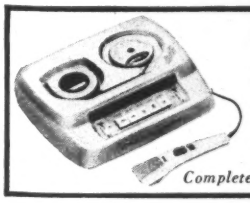

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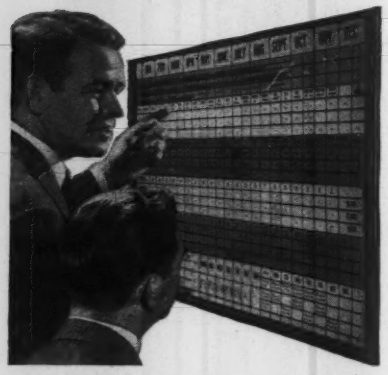

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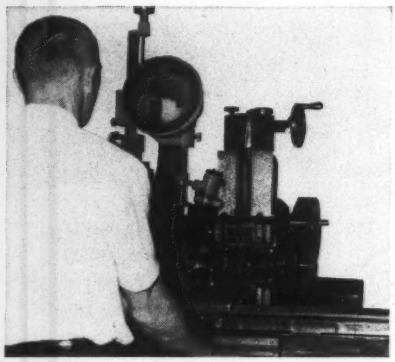
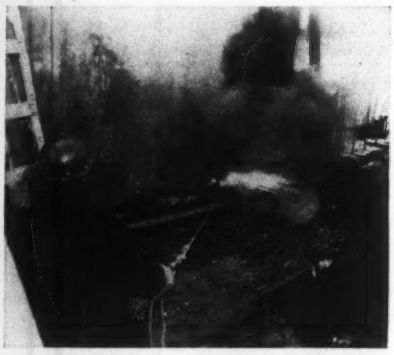
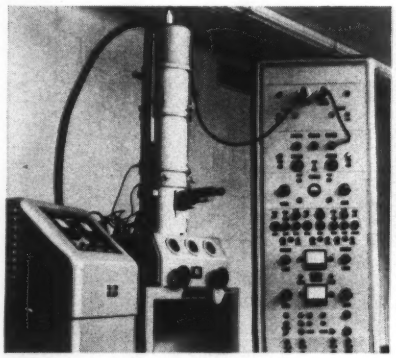


ELECTRON BEAMS: A new machine cuts shaped holes with diameters as small as 40 microns in materials such as tungsten, diamonds, and steel with an electron beam. Cutting designs are electronically programed. The electron beam is pulsed to minimize the effect of heat on adjacent work areas. *L.R. Industries, Inc., 50 MacQuesten Parkway South, Mount Vernon, N.Y.*

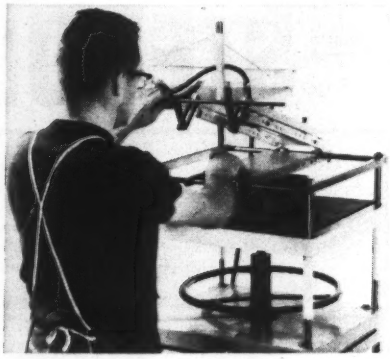


3-D FORMING: Three-dimensional forming operations are performed on this plastic press. The single unit is equipped to stretch-, vacuum-, and blow-form thermoplastic sheets up to 18 inches square. It is recommended for the lab and short-run production. *"Di-Arco Model 18A," O'Neil-Irwin Manufacturing Company, 575 Eighth Ave., Lake City, Minn.*

CLOSE CHECK: This new portable optical projector may be attached to machine tools to allow continuous magnified checking, measuring, and comparing with transparent overlay charts. Accessories are available, including illuminators for identifying contours and surface characteristics. *"Machine Tool Projector," Stocker & Yale, 40 Green St., Marblehead, Mass.*

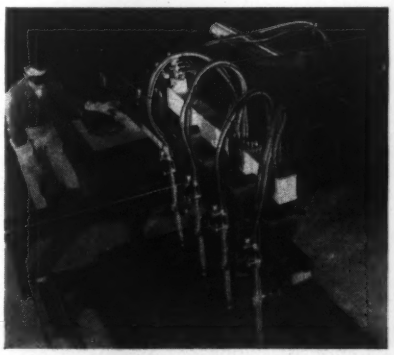


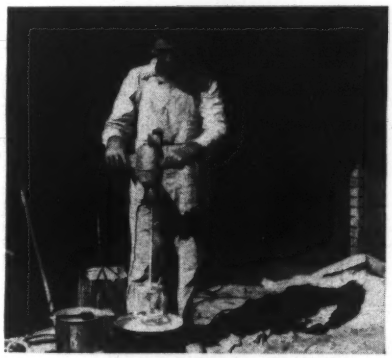
SWORD OF FLAME: Here's a new torch that will cut through concrete, metal, or any hard material of any thickness. Special powder is mixed with oxygen and burned at the lance tip at about 8,000° F. The torch is said to be especially valuable where vibration is undesirable. *"Oxweld ACL-4 Powder Lance," Linde Company, 420 Lexington Ave., New York 17.*



» **THIS MONTH:** *new tools for cutting; new instruments for quality inspection; material for experimental development; devices to make small jobs easier; moving your materials.*

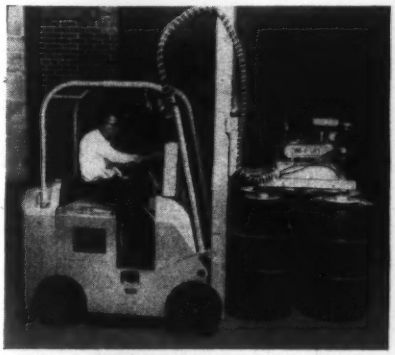
COMPACT CUTTER: This new pantographic torch-cutting machine is a compactly designed space saver. The controls for gas pressure, four motorized torches, the machine carriage, and the tracing device are located above the tracing table, within easy reach of the operator. *"Linagraph," Air Reduction Sales Company, 150 East 42nd St., New York 17.*

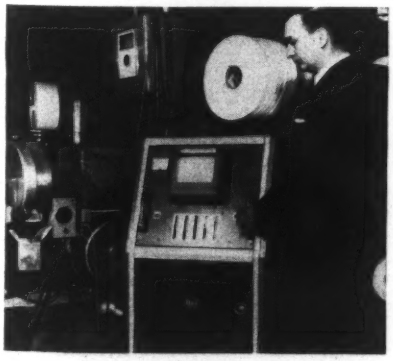




MIXING IT UP: Anything from thin varnish to putty can be blended with this new mixer. Two propellers suck light materials from the top and heavier materials from the bottom of the container. Vertical vanes have cutting edges which slice up semisolid deposits. *"Jiffy Mixer Model H," The Jiffy Mixer Company, Inc., 515 Market Building, San Francisco 5.*

SUCTION ACTION: Here's a simplified, low-cost lifting attachment for fork trucks. Four suction pads are adjustable in two directions and can be operated individually. A safety reserve vacuum system takes over in case of engine failure. Installation is said to take under 5 minutes. *"Vac-U-Lift," Vac-U-Lift Company, Division of Siegler Corp., Salem, Ill.*





QUICKER THAN THE EYE: Said to inspect production-line output and compute deviations from standards 100 times faster than manual methods, this electronic instrument counts, weighs, computes, and records individual standard deviations. *"Standard Deviation Meter," American Machine & Foundry Company, 261 Madison Ave., New York 16.*

more news on next page

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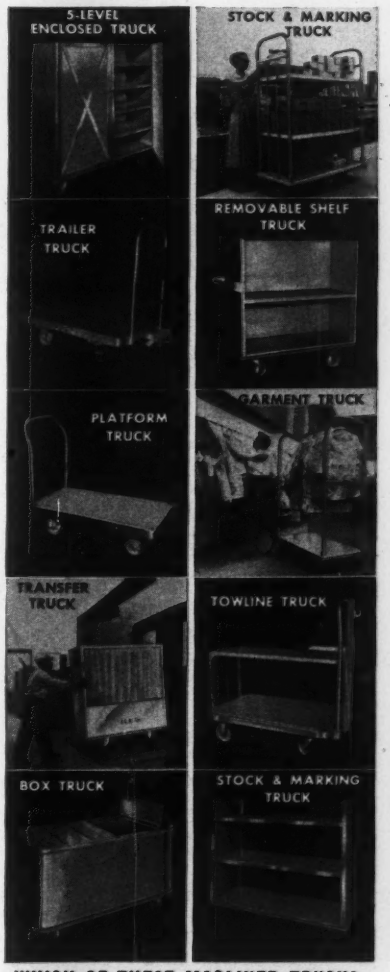

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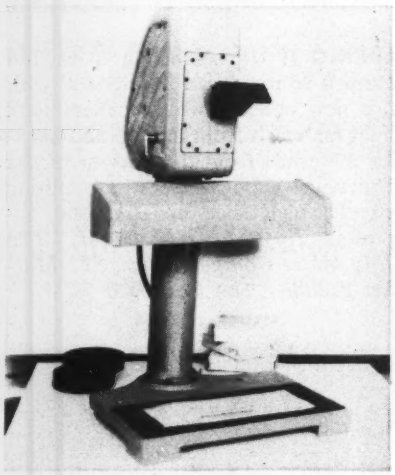
TOO CLOSE FOR COMFORT: An intruding hand held within the protected perimeter of this new alarm is enough to set it off. It can be adjusted two ways: to activate when protected equipment is touched or when a person approaches beyond a pre-set limit. The system is designed to sound an alarm if any of the wires are tampered with or if any of the components are not functioning properly. *"Proximity Alarm," R. B. Strawn, Research and Development Department, Diebold, Inc., Canton 2, Ohio.*

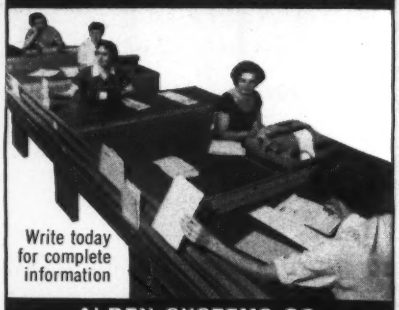
ECONOMICAL MICROFILMING: A new portable microfilm recorder is said to cost less than any unit on the market. Weighing only 20 pounds and standing only 25 inches high, it sells for $450 or leases for $15 a month.



The unit is prefocused, and one operation records and advances the film for the next exposure. It accepts 8,000 exposure rolls of 16 mm. film at a cost of $15 each. A distributor "reading" service eliminates the need for owning a microfilm reader. *"Regiscope Microfilmer," Regiscope Corporation of America, 799 Broadway, New York 3.*

LONG LIFE: A new typewriter ribbon has exceptionally long life, according to its manufacturer. Tested on a newspaper teletypewriter machine continuously for eight days, the ribbon showed "no appreciable wear in the fabric and nominal ink depletion." The material is extra thin, permitting

Speed paper work flow with ALDEN MODULAR CONVEYORS



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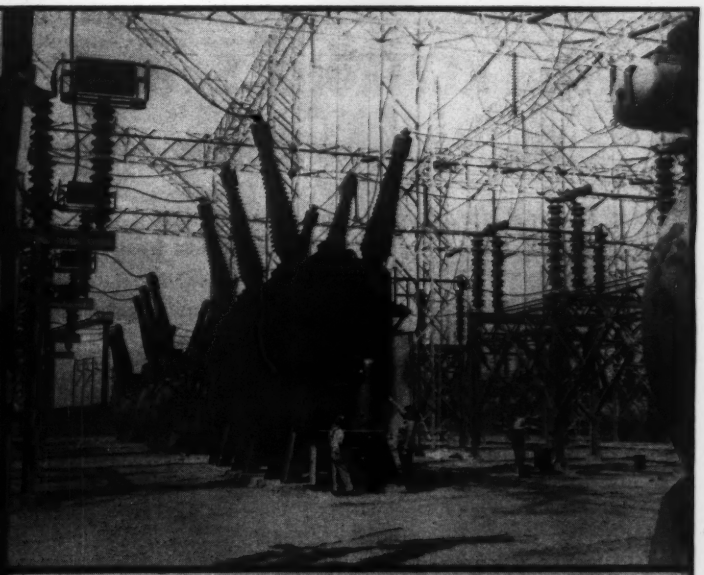

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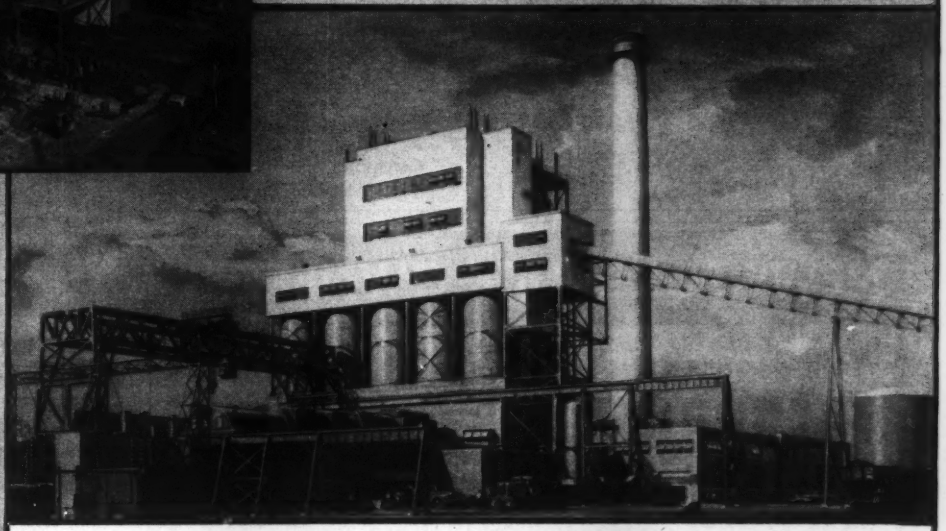

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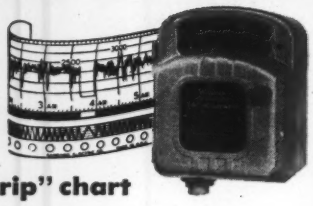

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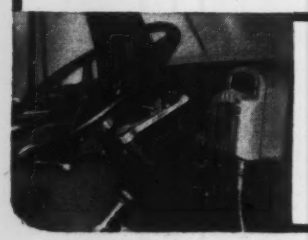

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more ribbon to be wound on a spool. A sharp, crisp image is claimed, making it desirable for photographic reproduction. *"Commander," Columbia Ribbon and Carbon Manufacturing Company, Inc., Glen Cove, N.Y.*

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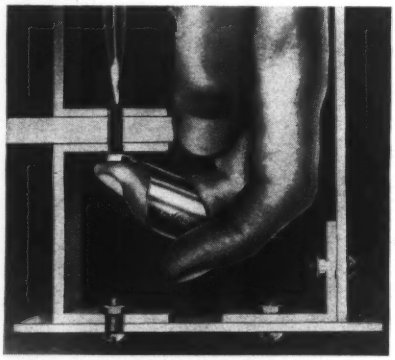

on the finger like a ring and can be adjusted to different-size fingers. The wrenches are supplied in the most popular hex-head nut sizes. *"Touch 'n Hold," Beaver Tool Company, P.O. Box 256, Huntington Station, N.Y.*

HEAT INTO ELECTRICITY: The principle of converting heat directly into electricity can now be applied on a wider experimental scale. Thermoelectric generator elements made of lead tellurite are being offered for laboratory and prototype applications. In addition to basic conversion applications, the elements are expected to convert wasted heat into useful energy. *Minnesota Mining and Manufacturing Company, 900 Bush Ave., St. Paul 6, Minn.*

VACUUM VALVE: A new low-priced valve moves small quantities of heavy, viscous substances in a reliable, measurable flow without heat or pressure, according to the manufacturer. When activated, the valve dispenses the material and produces a vacuum which sucks more material into the chamber, readying it for the next dispensing cycle. *"Gear-Vac," Eco Engineering Company, 12 New York Ave., Newark 1, N.J.* —E. G.

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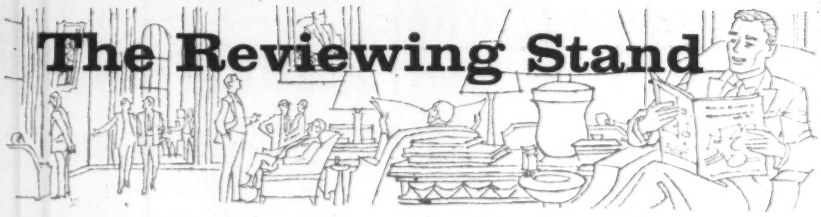

Management in Perspective

Life's competitive pressures leave their mark on our memories and shape our opinions toward people and issues of the present. Clarence B. Randall, retired business executive and active business philosopher, can take a clear and dispassionate view of management and its motives. Mr. Randall has gone off at right angles to the economic path in order to review his experience with a detachment that is impartial, if not exactly impersonal. He has an unusual gift of expression and a style of disarming simplicity but penetrating exactness of meaning.

In a recent letter to the Editors, Mr. Randall writes: "Having reached that delightful time of life when I want nothing, I do not care what people think, so long as I say what I truly believe." In the first article of his new series on the folklore of management, he examines the "Myth of Communications" and reflects the perspective of wisdom in an area where motivation, candor, and responsibility are at times confused, with a net loss to meaning.

The Challenge Seekers

Many years ago, the Editor received an elementary lesson in consumer interest while watching his infant daughter probing a sugar bun for raisins. Each time she discovered and devoured a raisin, she gave a high-pitched squeal of glee. The next day, the Editor brought home a small box of raisins and presented them to his enterprising offspring, enthroned in her high chair. She opened the box with violent curiosity, spilling the raisins all over the tray. There was a squeal of delight. She ate a few raisins, hurriedly surveyed the others, lost interest, and swept them over the brink and out of her sight.

As he stooped to gather up the raisins, the Editor was reminded that every conquest must have a challenge, and there is no incentive to achievement like curiosity about hidden benefits, rewards, and facts. Maybe that's what makes business with its obstacles, uncertainties, and unknown elements so interesting. There is no fun in a sure thing. Any child can tell us that.

Mysteries of the Market

There's a lesson somewhere in the demise of the Edsel. Never was a market so researched by experts, never was a car so expensively launched, and never was a product so decisively rejected by the consumer. We have a suspicion that the primary impulse for the creation of the Edsel came from the wrong end of the assembly line. Unfortunately, the Edsel (a sound product from an engineering standpoint) was designed and promoted for a particular type of buyer who simply didn't exist.

All of which suggests that markets are not created by engineers or market executives out of a synthetic environment. Ford, with commendable candor, has admitted its error.

Looking back over Ford's success with the Model T, which opened a period of industrial and social revolution, its recapture of a lost market with the Model A, and its esthetic appeal to the style-conscious with the Thunderbird, one is reminded that there is no formula for holding a top position in industry. Forty years ago, when the Editor sold Model T's for a brief and none too rewarding period of his life, the only promotion for a Ford at a Newark auto show was a phonograph record that spoke with repetitive but truthful monotony: "It takes you there, and it brings you back. It takes you there, and it brings you back." —A.M.S.

TEACHING BY TV

Bell System facilities meet a new need. Already a vital link in filling educators' requirements within a locality, state or across the nation

HELPING TO TEACH . . . HELPING TO LEARN. Classroom scene in Cortland, N. Y. This is one of the schools now using Educational TV. More than one TV receiver can be used where teachers wish to accommodate larger classes at one sitting.

An interesting current development in education is the use of television for instruction—both in classrooms and in the home.

Evidence that a shortage of qualified teachers is developing coincides with the need for some way to meet the awakened interest in mathematics, physics, chemistry, and education in general—from the elementary school to the college level.

Many educators, in studying the twin problem, are thinking more and more about the possibilities of Educational TV in their teaching programs.

In transmitting TV lessons and lectures from place to place, various means are available. Closed circuit Educational TV systems between schools may be required. Or connection between broadcasting stations in different cities. Or a hook-up between closed circuit systems and one or more broadcasting stations.

Whatever distribution of TV is needed, in city, county, state, or across the country, the Bell Telephone Companies are equipped to provide it. They have the facilities and years of know-how. And the on-the-spot manpower to insure efficient, dependable service.

For over three years, the local Bell Telephone Company has provided the closed circuit ETV network which successfully serves thirty-six schools in Washington County, Maryland.

In Louisville, Kentucky, telephone company facilities now connect five elementary schools. In New York State, they serve a high school and seven other schools in the Cortland area.

In San Jose, California, they link four schools with the campus of San Jose State College. And in Anaheim, California, eighteen schools are served by TV.

The largest of the many current educational TV projects is called Continental Classroom. The Bell System is one of the business organizations which support it.

In this great "classroom," about half a million people get up early each weekday to view a half-hour lecture on Modern Chemistry on their TV sets at 6:30 A.M. This 32-week college course goes from coast to coast over Bell System lines.

The Bell Telephone Companies believe their TV transmission facilities and know-how can assist educators who are exploring the potential value of educational television.

They welcome opportunities to work with those interested in this promising new development.

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